Clinical Lecture ON EPITHELIAL CANCER OF THE TONGUE.

Delivered in King's College Hospital, June 7th, 1872.

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GENTLEMEN,—The subject of our consideration to-day is a disease which is only too common, and of which, during the present and last winter session, I have had no less than six cases under treatment in the hospital. It is that kind of cancer which assumes the form of an irregular and exuberant deposit of cells, identical with, or at least resembling closely, those cells which form the normal covering or investment of mucous membrane and skin, and which are called "epithelial," and are, so to speak, formations germane to the part affected.

The common forms of the disease are included by Hannover and Bennett under the name *epithelioma*. It is considered by the best pathologists, both in this country and abroad—Paget, Virchow, and Rokitansky,—to resemble so closely in its course and effects the real carcinomatous diseases of scirrhus and cephaloma as to entitle it to the fatal distinction of being placed among the cancerous diseases; while others consider it to be cancroid, or resembling it, in its characters. The most characteristic features are—its uncontrollable growth; its progressive invasion of neighbouring tissue; its supplanting or pushing aside and destroying the growth of the normal structures; the very severe darting pains which attend its course, caused by its involving the ultimate fibrils of the nerves of the part, in the same manner, perhaps, as a corn affects them under the pressure of the boot; its liability to invade the lymphatics, and so to make its way into the system; and its occasional recurrence in the deeper organs and viscera, sometimes as epithelial deposits, and sometimes as one of the more decided malignant growths—namely, encephaloma. On the other hand, it is more tardy in its fatal progress than the more virulent forms of carcinoma, and is much less apt to recur in the deep-seated viscera as a secondary deposit, though its progress resembles in many important points that of scirrhus or hard cancer, especially that aspect of the latter in which the advocates of its local origin and slow continuously progressive course view it. And sometimes its microscopic elements can, taken by themselves, with difficulty be distinguished from some of the cell forms of scirrhus cancer. This is especially the case in that form of endogenous cell designated by Paget as "brood cells," where more than one nucleus is seen enclosed in a mother cell, as is usually the case in hard cancer. In some of its more mild manifestations epithelial cancer can scarcely be distinguished, even microscopically, from an ordinary warty growth, such as that which is common enough on the hands of young persons. In both may be observed the masses of clustered, more or less flattened epithelial cells, lying upon each other concentrically, like the layers of an onion, with little or no fibrous or connective tissue, and forming, by the intimate adhesion of the cells themselves, a very tough, hard, and resisting mass. It is only by the persistency and recurrence of the growth, the pain which attends it, its gradually spreading beyond the site originally affected, and its effects upon the general health, that epithelial cancer can be distinctly diagnosed. In many cases the disease is said to become developed out of so-called benign warty tumours, which are, consequently, usually suspiciously viewed by practical surgeons. And it may be said that the more closely adherent, hard, and slow-growing the tumour, the less disposed it is to ulcerate, and the less painful in its manifestations, the less dangerous its character may be estimated to be; while, conversely, the more loosely its cells are held together, and the more disposed it is to become disintegrated and to form an ulcer, the more rapid is its course and the sooner do the lymphatic glands become affected. Cases are recorded in the Pathological Society's "Transactions" in which the amount of fibrous stroma produced by the development of fibre-cells in the mass is so great that the disease assumes a more doubtful pathological character, and may be assigned to another place in the classification of pathologists more closely approaching to the scirrhus form of carcinoma. Some cases of so-called scirrhus have, I believe, been of this kind. Again, the disintegration of the cell growth may be so rapid that the features of the disease may assume the form of an open ulceration of a malignant character rather than that of a tumour; and many such cases I doubt not have been denominated "cancerous phagedæna." In fact, the more advanced and minute pathological observations become, the less disposed are practical men to draw any broad line of demarcation between these diseases. In well-marked cases the signs are plain enough, but at a time when diagnosis is most valuable the indications are usually the most slight.

In the tongue, the especial seat of the disease to which I wish to call your attention, these varied characters of what I consider to be essentially the same disease are commonly found. In the cases brought before you we have some commencing as a small primary fissure or cleft, very painful in character, with hard, raised, and thickened edges, and intractable progress. This has been described by some as the superficial form of the disease. Others have commenced as a somewhat deep-seated and very hard tumour, attracting the attention of the patient from the first by its tenderness, darting pains, and interference with the use of the organ in articulation and mastication, rather than by any sore or ulcer on the surface. This form was well illustrated in the case of James D——, aged thirty-four, who was in the Victoria ward from April 6th to May 11th of this year. In this patient attention was first called to the disease last July (a year ago), by a pain on the right side of the tongue, first felt after smoking a foul pipe. On the application of a little alum and abstaining from his pipe it became better, but got bad again in September last. He then went into the country and recruited his general health, and then felt nothing of it till two months ago, when he noticed a hard lump about the size of a nut. This rubbed against the sharp edge of a bad tooth, and then became excoriated. There was no history either of syphilis or cancer. He has always been temperate, but has suffered from rheumatic gout and from frequent attacks of bilious vomiting and dyspepsia. Now there was a good deal of cachexia about the man. He was thin, with glistening eyes, anxious look, and suffered agonising pain night and day. He presented a decidedly jaundiced tinge, but there was no enlargement or tenderness perceptible about the submaxillary glands. After the removal of about one-third of the right side of the tongue along its whole length, followed by the free application of the chloride of zinc, the patient had an attack of jaundice, indicating either some already decided organic change or great functional susceptibility in the liver. From this, however, he in a few days got better, and finally made a very good recovery, picking up strength wonderfully quickly, feeding well, and being free from pain. On the 11th of May he left the hospital with the wound nearly healed, and expressing himself greatly relieved by the operation. He has since attended as an out-patient, and has had lately another piece of the tongue removed for a suspicious hardness which appeared at the base of a small sore left at the front part of the tongue.

Characterised similarly by a hard, solid lump appearing in the side of the tongue, and gradually involving two-thirds of the organ, was the case of Wm. C——, aged forty-three, a stout, thick-set, healthy-looking cab-driver in the Albert ward, who was operated on in March last. In this case there were present, when I first saw him, clefts and fissures on the side and dorsum of the tongue, which gave a strong suspicion of syphilis, of which there was some sort of a history of twenty years before. He was treated for some months as an out-patient by my colleague, Mr. Bell, and took large quantities of iodide of potass without benefit. The disease getting worse, he was admitted for operation, and again, under my own observation, an antisyphilitic treatment (iodide of potass and mercury) was followed, and nitrate of silver applied regularly. The disease, however, steadily progressed, and to relieve the poor man from his great suffering I removed under chloroform three-fourths

of the tongue, including the tumour. The microscope showed both the tumours in these cases to be decidedly epithelial. They still visit the hospital occasionally as out-patients, and continue in good condition so far.

In these cases ulceration commenced secondarily as a slight abrasion of the surface, smooth and oval in shape, in one case, and in the other as fissures or cracks. This form has been described by some as the deep-seated variety, and has been alluded to by Sir James Paget as "a first formation" in masses of circumscribed infiltration of tissues beneath healthy skin or mucous membrane. After being thus formed the hardness and bulk of the lump cause the surface of the mucous membrane which covers it to become abraded by any exciting cause of irritation, such as the sharp edge of a decayed tooth or a tobacco-pipe. But such secondary causes would have no such effect without the previous formation of the diseased induration. If it were not so, we should find the disease in many more of the multitude of smokers with bad teeth who are to be found in these days. It would be very much more common than it actually is.

In one case, indeed, that of J. G——, aged sixty-eight, admitted into Victoria ward on May 3rd, a florid and not a sickly-looking man from Somersetshire, the patient smoked regularly, but had the habit of keeping his pipe on the right side of his mouth, whereas the disease appeared on the left side of his tongue in the usual place, at the edge midway between the root and the tip. He had noticed pain and soreness in this spot so long as ten years ago. Thinking it was irritated by the molar teeth on that side, he had these removed, although perfectly sound, four years ago. Twelve months ago he observed the part for the first time to be rather swollen and hard. The pain becoming worse six weeks ago, he began to emaciate, and the tumour got rapidly larger and more painful, and the ulceration spread further. On admission he was found to have a tumour about the size of a bantam's egg on the left border of the tongue, hollowed out in the middle by an extensive ulceration, covered with an ash-coloured slough, and surrounded by fungous, raised edges, with a very fetid discharge. Frequent hæmorrhages had occurred from the middle of the sore. A submaxillary lymphatic gland could be felt enlarged and hard on the same side. There was a copious and distressing flow of saliva, and the poor man suffered excruciating agony both night and day. The effect of loss of sleep and suffering speedily became visible in his rapid emaciation and weak accelerated pulse. This patient had occasional pain in the ear of the same side, on which he was also rather deaf. On May 3rd, under chloroform, and aided by the use of the gag (which I shall presently describe), I removed two-thirds of the tongue, cutting clear of the tumour, and afterwards taking away some considerable portions which appeared to me to be rather suspicious in feel and appearance. Free hæmorrhage occurred from numerous vessels, which was with some difficulty controlled, the substance of the tongue being very friable, and giving way easily under the ligatures. The chloride of zinc and the perchloride of iron were freely applied, both separately and in combination. A blackened slough was formed all over the sore, which, after some days, came off, showing a smooth, healthy, and regular healing surface. The sore rapidly healed after a few applications of the solid chloride of zinc, which was employed to smooth down all irregular granulations; and on the 25th of May the man, looking vastly improved in health, free from all pain, and able to eat and speak with more comfort than he had had since the disease appeared, was discharged with the sore almost healed, at his own request, in order to look after his little business in the country.

The subsequent history of these cases is illustrated by that of Thomas M——, aged fifty-four, whom I now present to your notice. He was first operated upon on the 18th November last. The tumour was on the left side of the tongue, small, but extremely painful, with two small superficial sores on the surface and no glandular enlargement. The man had a very cachectic look. There was no syphilitic history; but, following my usual practice, before operating I put him on a preliminary course of iodide of potass and tartrate of iron, touching the sore twice a week with solid chloride of zinc. No relief resulted from this treatment, and the poor man got gradually thinner and more cachectic, from the constant wearing pain day and night, and the interference with his power of masticating food. Much relief followed the operation, which was attended with but little hæmorrhage. The patient picked up strength rapidly, now that he could masticate his food with ease and comfort. The chloride of zinc was applied regularly three times a week until Dec. 1st, when he was discharged apparently well. In February last, however, he came again to the hospital, complaining of pain and smarting in the tongue when he took his food; and it was found that an ulcer had again appeared at the site of the operation, with a considerable hard thickening at its base. Still there was no glandular enlargement, and the pain was of a darting, stinging character, passing backwards along the course of the gustatory nerve. I now determined to remove more of the organ than I had done before; and on the 7th February I applied a stout ligature thread after the fashion I employ for ligaturing nævus—namely, by a single hempen thread, transfixing the tongue with one loop well behind the tumour and another in front of it, the two ends of the string being brought round the edge of the tongue opposite each respective loop, and then passed through and tied tightly on the dorsum to the median line of the tumour. I then removed the tumour with a curved bistoury, taking away with it the greater part of the sublingual gland, towards which the hard diseased mass seemed to have progressed. The ligature had the effect of restraining the hæmorrhage very much. The wound was then freely cauterised with liquefied chloride of zinc. The ligature came away in a few days, and with it a considerable slough of the whole surface of the sore. The wound healed well and rapidly, and he was again discharged with it quite healed on the 6th March. None of the glands about the root of the tongue had become affected. Lately this patient, after some months of comfort and immunity from pain, has again applied with a small painful sore on the old cicatrix, to which we are now applying the chloride of zinc twice a week. He has again assumed the worn and cachectic appearance.

Another case illustrative of the subsequent course of these painful cases is that of Jas. G——, aged thirty-three. This poor man, at his comparatively early age, looked quite an old man and worn down by pain when he first applied in February last. He had previously been operated on twice by different surgeons without chloroform, and each time the disease had returned in the same way as at first—i.e., by the formation of a superficial sore without induration, which latter came on secondarily in each instance. There was no history of syphilis or cancer in the family. He had been put under a course of iodide of potass. The part began to give him trouble four years before. The first operation was done two years and a half ago; and the last, eight months before his admission. The sore was about the size of a fourpenny-piece, in the usual place on the side of the tongue (the left side), with a hardened base, extending by this time considerably beyond the sore. He was very sallow and cachectic-looking, and the glands on both sides below the angle of the jaw were of the size of filberts and very hard. After preliminary treatment by blood-tonics and all kinds of sedatives, which failed to give him anything like the relief obtained from the former operations, I, at his urgent request, operated under chloroform, and, with the aid of the gag, removed more than one-half of the tongue, with but little hæmorrhage; operating in the same way, and applying the same combination of styptic and caustic, as in the last-described case. The wound healed up very rapidly after the first large slough had come away, and notwithstanding the repeated application of the chloride of zinc. He experienced great relief from the operation, and left the hospital, after one month, very much improved in comfort and health. We have since seen him several times, and, so far, he has remained in a condition which may be considered satisfactory. The glands have not increased in size, and he can speak and masticate without pain, and is certainly improved in looks.

The last case I shall bring to your notice is a patient who has just come into the hospital from Somersetshire, in whom we find a well-marked and advanced specimen of the disease of the tongue under consideration. George B——, aged forty-five, a delicate-looking man you see, evidently much worn by suffering and interference with the taking of food. On opening his mouth you observe a very large, solid tumour, of the size of a hen's egg, embracing the whole of the left half of the tongue, commencing, as in all the other cases, opposite the bicuspid and anterior molar teeth. The sur-

face of the tumour is covered with a deep ulceration, with raised, ragged edges and deep sloughy-looking fissures, and exhaling a very offensive odour and a putrid discharge. There is no affection of the glands apparent on careful examination; but the patient complains of deafness and much pain in the ear of the same side from implication of the gustatory and chorda tympani nerves. He has great mechanical difficulty in mastication and deglutition, and has at times lost much blood by hæmorrhage from the ulcerated surface of the tumour. Pain, want of food, and hæmorrhage have reduced him to this distressing condition.

The disease in this case commenced only in December last, and has pursued a much more rapid course than in any of the other cases before described. It began at the very first with ulceration, attributed as usual to a decayed tooth; and the substance of the tumour is very friable, easily breaks down, and bleeds profusely. To-morrow I propose to excise nearly the whole of the organ under chloroform. And as it is important in his present weak condition to prevent him losing blood as much as possible, I shall, before cutting away the tumour, pass a ligature across both the ranine arteries at the base of the tongue, and tie them up tightly before using the knife, applying the chloride of zinc and perchloride of iron freely after excision.

You may, perhaps, think that in such a case it would be preferable to excise the whole organ; and I think that, with the use of the gag which I shall presently describe, this could safely be done, under chloroform, through the mouth of the patient, without the necessity of performing the formidable operation practised by the late Professor Syme—viz., division of the lower jaw at the symphysis and wide separation of the rami; or that of Regnoli, of making a T-shaped incision into the floor of the mouth, and drawing the tongue through it before excising. But one-half of the organ is soft, mobile, and healthy; and I hold strongly that when an operation is to be done chiefly with a view to the relief of the patient's sufferings, and without much hope of its entire eradication, as in these instances, no more than is necessary of the healthy parts need to be taken away; and, moreover, that the disease is just as likely to return in the scar at the base of the tongue as in the side of it which is left behind. In fact, I consider that it is more important to cut away the tissue *deeply* in the direction of the course of the lymphatics—viz., towards the base of the tongue, than to cut *laterally* towards the healthy side, always supposing that the diseased parts are completely removed.

An important consideration in these cases, apart from the relief afforded to the patients, is whether the duration of this disease in the tongue previous to the destruction of life is so protracted as to hold out a fair prospect of lengthening the term of years and effecting relief to the patient by one or more operations. It is often said that epithelial cancer of the tongue goes more rapidly to its fatal termination than in other parts. This I certainly believe to be the case with respect to the lips, which offer but little impediment to the prehension of food, as in the frightful case now under the care of my eminent colleague, Sir W. Fergusson, in this hospital, or to the uterus, which is not directly concerned in the vital processes. But it is not true in the case of the œsophagus or any other part of the intestinal tract, where the mechanical impediments of the growth become an important element of destructiveness. With the exception of the last case of George B——, the disease has lasted already in the patients I have had under my care lately from two to four years. In other recorded cases it has lasted even much longer, progressing very slowly. In one case recorded by Mr. Holmes Coote in the "System of Surgery," the disease lasted twelve years, and in another sixteen years. In a case recorded by Mr. Ceely, of Aylesbury, under what I cannot but consider as the inappropriate title of "soft cancer," the disease, after being removed, had lasted thirteen years, and the poor patient was still alive. These have been, doubtless, cases in which a solid growth of closely adhering cells has been the originally prevailing and characteristic element of the disease. In other cases, where rapid disintegration and ulceration come on early, and form the most striking manifestation of the disease, it kills in much less time, as in that of the late Mr. Bransby Cooper, which lasted only ten months, and proved fatal from arterial hæmorrhage.

The conditions, then, of the disease which we have to consider in determining its treatment are these: a very painful and distressing course, wearing down the vital powers by constant suffering, by loss of rest, by interference with those processes of nutrition ministered to by the prehension and mastication of food, by the debilitating and offensive discharges; usually a sufficiently protracted career, from one to three or four years, giving time for the influence of treatment and the checks of operative interference; a less liability than in the more malignant forms of cell-growth to attack independently the internal viscera; and a more tardy course in invading the neighbouring lymphatic system. All these seem to me in favour of an early and repeated application of operative measures, not so much, perhaps, with a view of ultimately effecting the cure of the disease, though the possibility of this result even must not be lost sight of, but, as in a great many other maladies which we have to treat, to avail ourselves of the most likely means to arrest and retard its progress; and, what is very considerably conducive to this, and at the same time is probably more welcome to the sufferer, to relieve his tormenting pains far more effectually than any combination of drugs whatever.

To remove the disease the least painful, most manageable, and most effective plan is, no doubt, by the application of the knife or scissors. Caustics in this situation work too slowly and superficially, and too painfully and uncontrollably to be valuable in any other way than as secondary to the absolute removal of the diseased mass. Used in this way they are of great value, and are always employed by me in the form of the solid or a saturated solution of the chloride of zinc, sometimes combined with the perchloride of iron, and frequently applied to destroy any remains of the disease which may have escaped the knife. The latter has also the additional advantage of stopping any bleeding which may still further lower the resisting powers of the patient to the invasion of the disease.

Up to the present time the operation for the removal of the tongue or any part of it has been considered by most surgeons as one of those in which the blessings of anæsthesia could not with safety be afforded to the patient, for reasons which will be at once apparent—viz., first, the removal by the anæsthetic agent of the voluntary assistance which the patient can render in all operations upon the interior of the mouth, by keeping the jaws and mouth wide open and the tongue steady; and secondly, the supposed danger, in profuse bleeding into the pharynx, of suffocation by the blood passing into the larynx and trachea. It is very evident that if we cannot in these cases offer to our patient a means of relief unattended by immediate pain, and that of a most severe character, at least half of the advantages of, and inducements to, the treatment involving such an operation are thrown away, and patients will be naturally indisposed to listen to the only promise of relief which can honestly be held out to them. If, then, we can render by any means the necessary operations painless, we confer, I think, a boon upon humanity not by any means small to the poor creatures thus afflicted.

By the use of the instrument which I now show you, made for me by Messrs. Matthews, we obtain a perfect and steady command over the jaws, without encroaching upon or interfering with the cavity of the mouth. (See figure.) It consists of four teeth plates, which act on both sides upon the upper and lower bicuspids by means of a pair of powerful cross levers, placed outside the cheek, and opening independently of each other by a screw on each side through a simple hinge joint. Combined with these levers as they bend into the mouth is a groove to receive the angles of the lips, which are thereby kept wide apart, and out of the way of the light, which is so necessary in securing bleeding arteries in a deep cavity like the mouth. The two sides of the instrument are connected and kept together by a bent piece of metal, which passes under the chin altogether out of the way of the operator, and which is capable of being adjusted to the width of the lower jaw by a sliding groove and fixed by a screw. The whole is held firmly upon the patient by a strap passing round the back of the neck and buckling on to the opposite piece. This instrument has been adopted after a great many trials of different kinds of gags, including that most valuable one for operations upon the palate invented by Mr. Thomas Smith, but which, from the embarrassing presence of the tongue-plate, proved in-

admissible in operations upon the tongue. In some respects the present instrument resembles this, and the differences are mainly such as refer to leaving free the tongue and

holding the lips well stretched out. I may add that the gag is equally effective in operations upon the tonsils and larynx, and that Sir W. Fergusson employs it, with entire satisfaction, in cases of staphyloraphy.

More difficulty than you would imagine has attended my efforts to get a gag that could be depended upon to resist the struggles of a patient under chloroform, and to meet the ridiculous ease with which the patient, by simply opening his jaws a little wider than the angle at which the gag has been fixed, and at the same time pushing with his tongue and cheeks, as in the act of spitting violently, which so commonly occurs under chloroform, can render nugatory all your precautions to secure a full command over his mouth. The ordinary dentists' gags are often more than embarrassing and worse than useless in these cases. One of the most frequent difficulties arises from the absence of the teeth so commonly drawn to prevent irritation of the tongue on the affected side in these cases. The independent action of the two sides of the gag just described enables one to be opened wider than the other to meet the extra width required by the absence of teeth. A one-sided gag is much more easily displaced by the patient and is more difficult to fix than a double-acting one.

Having thus obtained the necessary control of the movements of the patient's lips and jaws during the insensibility produced by chloroform, we have only to look to those precautions against bleeding and the passage of blood into the larynx which are usually found most efficacious, such as turning the head down to one side and clearing the throat with the finger. If the knife be used the tongue must be held well out of the mouth by a good-sized vulsellum forceps, with hooks sufficiently large and widely placed to prevent their tearing out of the sound fleshy substance of the tongue into which they should be inserted. If the tumour is likely to be very vascular, as may be in some measure divined from its appearance, I have usually passed first a stout ligature across the ranine arteries under the base of the tongue, by means of a curved needle in a handle,—the one, in fact, which I devised for the performance of the operation for the radical cure of hernia. This controls the hæmorrhage until the cut ends of the vessels have been secured. The tumour is next seized by a pair of stout double-toothed lion forceps, such as those most useful ones which I now show you, and which we know in this theatre as Wilcox's forceps. I have found these by experience to be less apt to slip than any other I have tried. Then a curved, sharp-pointed bistoury, to transfix the tongue close to its base, and to cut first antero-posteriorly and then laterally across the vessels and nerves, will suffice rapidly to clear away the diseased mass. In securing the arteries much steadiness on the part of the assistant is required. The muscular substance of the tongue is so friable under the circumstances that it is readily broken down by too much vigour in drawing the knot; while the depth at which the cut vessels lie from the surface necessitates dexterity in slipping the thread over the forceps, the points of which should be conical and taper quickly to the end. The proper tying of the vessels, and the prompt application of the tincture of the perchloride of iron and chloride of zinc by a strip of lint tied round a stick, will render the use of the actual cautery rarely necessary to subdue the hæmorrhage. It is astonishing how rapidly the patients recover after this operation; and, if too much blood has not been lost, how soon they regain strength and a more healthy appearance. Freedom from pain, undisturbed rest at nights, improved appetite, and revigorated digestive powers account for this satisfactory result.

THE RELATIVE FREQUENCY OF DISEASE BETWEEN THE RIGHT AND LEFT SIDES OF THE HEART;

DEGENERATION OF THE HEART, ITS CAUSES AND MEANS OF AVOIDANCE.

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(*Continued from p.* 331.)

Changes produced in the muscular fibres of the heart by hypercarbonised blood—The carbonised heart—Its effects upon the respiration and upon the system generally—Modes in which it produces death—Indications of its existence.

THE effects of imperfect aeration of the blood are traceable in the tissues of the heart. They vary, however, according to the degree of impregnation of the blood with carbonic acid and to the length of time which such blood has circulated through the nutrient vessels of the heart.

Before tracing these effects, it may be observed that those in whom the muscular fibres of the heart have, in consequence of confinement to close, ill-ventilated apartments, undergone the particular degeneration in question, and in whom the blood retains a greater than normal proportion of carbonic acid, are never well. It would be impossible, until somewhat late in the disease, to put the finger upon any one organ and be able to say, Here is the disease. Still, every organ is depressed in its functional manifestation, and the whole body is changed in its sensibilities, its impressions, and its powers. The prevailing indications of disturbed health are—extreme muscular debility, inaptitude for exertion, depression of spirits, frequently an exquisite sensibility of the cutaneous nerves, feebleness of the pulse, variable appetite, and weak digestion. The bowels are generally sluggish, and their evacuations darker than natural, from the presence of almost black bile. Such, too, is often the condition of the blood and of the containing vessels, that a slight bruise of the skin produces an ecchymosis of unusual extent, which is exceedingly slow in being absorbed.

All such patients occupy in the daytime rooms from which they exclude every breath of air, provided they have the means of doing so; and where poverty prevents them from fully gratifying their sensations, they nurse themselves accordingly. At night, the one who is able to command the "comforts of life" retires to a feather bed surrounded by curtains closely drawn together, with door and windows closed, gas flaring, and fire burning; the other, whom poverty oppresses, betakes himself to a small, low, dark, ill-ventilated room, where, with his wife and four or five children, huddled together in a couple of beds, he passes the night in an atmosphere rendered poisonous before morning by the accumulation of carbonic acid.

Years pass in this condition of health; middle age is reached; it is passed; œdema of the feet at length sets in; general dropsy follows, from which the passage to the grave is but short. A short time before death occurs—a little before or about the time of the commencement of the œdema of the feet,—tricuspid incompetency and jugular pulsation are detected. At length the patient dies, a post-mortem examination is made, and the following condition of the heart is found:—

It lies in its pericardium surrounded by serum, apparently somewhat enlarged, the enlargement being due to dilatation of the ventricles, but of the right ventricle chiefly. Its superficial veins are large and distended with black blood; and the general surface of the heart is of a dull, slaty-red colour. This colour pervades the entire thickness of the heart's walls and the endocardium throughout both auricles and ventricles. On being handled, the heart is found to be soft, flabby, and seldom indeed above the average weight. The walls of the right ventricle are larger but thinner than natural; and occasionally the left ventricle is also reduced in thickness. The curtains of the tricuspid valve, on being rubbed between the thumb and finger, are found to have lost their natural feel, and the impression of softness and laxity of tissue is conveyed. They no longer meet so as to close their respective apertures; for, although their edges may be so fitted and approximated as to render their closure apparently complete, yet when the heart is placed as in its natural position, and water is poured, however gently and however small in quantity, into the right auricle, it passes at once into the ventricle beneath. Less frequently the pulmonic valves manifest the same condition of incompetency—always a similar want of firmness. The same distension of auricle and ventricle by dark blood as was observed in the dying trout, is here found; but as in the one so in the other, the auricle is more distended than the ventricle.

If now thin sections from the muscular walls of the heart be examined under the microscope, the following important changes are observed:—The minute veins lying on the outer surface of the muscular fibres are distended with dark blood; the muscular fibres themselves are less firmly and less closely knit together, and show a disposition to separate into their ultimate fibrillæ; whilst the cells or discs of which these fibrillæ are composed are, in like manner, less cohesively bound together. Instead of forming apparently flat discs or cells packed face to face in close linear arrangement, it is found that they are increased in their longitudinal diameter, and that they have in consequence assumed somewhat of an oval shape. The effect of this change seems to be to increase the distance between the transverse striæ, and to render the latter much less distinct than in the healthy fibre of the heart. Here and there along the course of a fibre small fissures or rents are observed, through which the sarcous element protrudes, enabling the observer, by the eversion of the edges of such fissures, to discover a containing sheath or sarcolemma, as in the voluntary muscular fibre of other organs. In the course of the various fibrillæ of which a fibre is composed, one or more of the discs have assumed a round, cell-like form, which in most instances is distended with a dark-looking serosity, but which in other instances contains a clear, bright, highly refracting substance. The former fluid is a portion of the serosity of the blood which has escaped by transudation from the over-lying veins and permeated the under-lying cell-walls. Its particular colour is due to a minute quantity of hæmatine furnished by dissolved blood-corpuscles. The bright, highly refracting contents of other cells are due to the presence of oil.

Not less remarkable are the changes found in the non-striated muscular fibres of which the heart's walls are in part composed. They are flatter and broader than natural, their edges are more irregular, the contents of the tubular sheath are less granular than in health, and they are of the same dark colour as the contents of the altered cells of the striated fibres. Some of their nuclei have undergone more or less conversion into fat, and minute globules of oil are seen here and there along the course of the fibres. Fat, however, is not a necessary element of this form of tissue-degeneration, because many instances occur in which it does not exist.

The degeneration in question is not only characterised by the microscopic and other appearances already stated, but by the presence of a superabundance of serosity, which saturates, as it were, every individual fibre, rendering the whole mass of the muscular walls of the heart soft and diffluent to the touch.

In the musculi pectinati similar appearances are observed. The epithelium of the endocardium is extremely thin and badly developed, and in some places detached from its basement membrane, which presents the same dull, slaty-red colour as the muscular structure of the heart. The basement membrane is likewise soft and pulpy, and the vascular layer consists of vessels so dilated and distended with dark blood that the interspaces are considerably reduced in size.

The connective tissue is generally free from any inflammatory exudation, but the fibres of which it consists lie bathed in the same kind of serosity which distends some of the altered cells of the striated fibres.

Now, this pathological condition of the heart, which is the result of deficient aeration of the blood extending over a long period, is distinct from every other known morbid process which affects the heart. It has no connexion with inflammation, and it is distinct from fatty degeneration, with which, however, it may, as we have seen, be associated. I therefore claim for it a distinct place in the nosology of diseases of the heart. It is, perhaps, difficult to adopt a term which shall sufficiently express the true nature of the disease; but as the changes produced in the heart are manifestly due to the action of a hyper-carbonised condition of the blood, the term *carbonised heart* may serve the purpose of distinguishing it from other affections of this organ.

From the condition in which the striated fibres are found, it is easy to explain why, during life, the action of the heart is so feeble and the pulse so small—why the patient always complains of feeling an amount of prostration which cannot be explained by general appearances—why there is such breathlessness on the least exertion—why death often occurs suddenly.

In the healthy heart the flattened discs forming the ultimate structure of the muscular fibrillæ are in two opposite conditions according as the fibrillæ are in a state of relaxation or contraction. When relaxed, the longitudinal diameter may equal or exceed the transverse diameter, and the muscular striæ are in consequence carried farther apart from each other; but when the fibrillæ are in the opposite state of contraction, the transverse diameter exceeds the longitudinal, and the muscular striæ are brought into closer approximation. In the diseased condition of the heart in question, the longitudinal diameter of the individual discs or cells of the fibrillæ is greater than natural. The tendency of the disease is, therefore, to cause the longitudinal to prevail over the transverse diameter, and, as the disease progresses towards this end, to weaken the heart's power of contraction; because power is represented by the degree in which the transverse diameter of the cells of the fibrillæ in action exceeds that of the longitudinal diameter.

It is manifest that, as the disease progresses, the cells of the fibrillæ lose by degrees their power of contracting, and that permanent relaxation is the ultimate condition in which they end. When that condition has been reached by a sufficient number of these cells to render the heart unable to force the blood through the extreme vessels, the patient may die from mere failure of the heart's power. Death in such a case has been gradually approaching for some time; but its advent is sudden at last. Upon the increasing debility which has now, perhaps, for weeks been patent alike to patient and to friends, there comes a sudden excitement—an unexpected stimulus to exertion, which causes the patient to put forth an unwonted power; and, in doing so, the heart is overwhelmed by the labour thus suddenly thrown upon it, under which it as suddenly falters—fails—dies!

In other instances sudden death occurs without any previous aggravation of the general condition of the patient. This occurrence is readily explained by the particular condition of the fibrillæ of the heart, as already stated. It has been shown that frequently some of the altered cells of these fibrillæ are distended by a dark serosity, others by oil; and that the sarcolemma in which they are enclosed is often marked by small fissures or rents. Now, if it happens—which is not unfrequently the case—that at any point of the heart this condition of the fibrillæ exists throughout the whole thickness or the greater part of the thickness of its walls, the natural efforts of the heart are sufficient to cause rupture at this point, extravasation of blood into the pericardium, and death. More frequently, however, it happens that, when death from this cause occurs suddenly, it takes place during the performance of some act of physical exertion, which, by throwing a sudden increase of labour upon the heart, excites it to unwonted efforts of contraction, under which the diseased fibrillæ give way.

Another mode in which death occurs in this disease is owing partly to the direct effects of the enfeebled heart

upon the circulation, and partly to the secondary consequences of tricuspid or pulmonic regurgitation, or to both of these lesions combined. The tricuspid incompetency is a frequent, the pulmonic incompetency a less frequent, lesion in this disease. The former produces general dropsy; the latter a particular condition of the breathing, which demands a more extended observation.

When the pulmonic valves are unable to close their aperture, a portion of the blood projected by the right ventricle into the pulmonary artery falls back into the ventricle, and thus diminishes the quantity which would otherwise reach the lungs. This occurring at every contraction of the right ventricle, a period is soon reached when the vessels of the lungs are very inadequately filled with blood. The requirements of aeration increasing with its defective accomplishment, the demand for more air is immediately felt throughout the whole system, but especially in the lungs. To meet the urgent necessity which deepens every moment, the supplementary muscles of respiration are called into play, violent and quickened efforts are made to expand the chest, and the breathing becomes in consequence distressingly laboured and panting. If this condition continues, a diminished supply of blood is quickly felt in the left ventricle, a correspondingly diminished quantity is projected into the aorta, the vessels of the brain being thereby only partially distended, the energy of the brain itself is not maintained, an indescribable feeling of faintness takes place, the countenance blanches, and life is grievously threatened. The recumbent posture at once assumed, a stimulus administered to rouse the energy of the heart, a counter-irritant applied to the precordia, and an abundance of fresh air, are the means to recover a patient from this threatening condition. When, however, this state of regurgitation has been reached, there is no hope of permanently allaying these paroxysmal attacks, and the breathing is ever afterwards liable at any moment to a recurrence of these painfully panting manifestations. But the regurgitation from the pulmonary artery into the right ventricle produces another injurious effect by causing a too frequent effort of contraction on the part of the heart. It will be remembered that, in detailing the result of my observations on the circulation in the newly-hatched trout, I stated that no sooner did the blood touch the lining membrane of the auricle and ventricle than they quickly, firmly, and resolutely contracted. In like manner with respect to the human heart, no sooner does the blood in the case now under consideration fall back from the pulmonary artery into the right ventricle than the latter, responding to the stimulus thus applied to it, contracts, and the repetition of this effort occurring more frequently than it is wont in the natural order of the heart's movements, quickly induces exhaustion in the muscular fibres of a heart already diseased, and thereby favours the occurrence of dilatation. To dilatation would be added hypertrophy if the nutrition of the heart were as active as it is in most other diseases of that organ; but as the condition of the blood is opposed even to the ordinary nutrition of the heart's structures, simple dilatation of the right ventricle is the most common form of enlargement which is found.

Where the tricuspid valve is incompetent, dilatation of the right ventricle is more rapid in its occurrence than in pulmonic incompetency; but where the two incompetencies co-exist, as is sometimes the case, the ventricular dilatation is both more rapidly and more extensively induced than where one or other valve alone is affected.

Practically speaking, our knowledge of diseased action is of no use unless we can recognise it during life. To simply discover its effects after death is of no avail to the living. The question therefore arises—Does this particular disease of the heart give any indications during life by which it can be recognised? Like every other disease, it has its particular and characteristic symptoms. Some of these refer to the heart itself, others to the general system.

Those which more particularly refer to the heart, show that the action of this organ is very feeble, that its sounds are but faintly heard in their accustomed areas, and that the space over which its impulse is felt is less than ordinary. It is sometimes difficult to determine the exact point at which the apex strikes the chest-walls; and when found, the apex-beat is felt as a feeble tap which seems to just touch the ribs and is gone again. When there is tricuspid regurgitation it is not always productive of a morbid sound either over the lower part of the sternum or immediately to the left of this bone over the body of the right ventricle. The regurgitation more particularly manifests itself by jugular pulsation, which is best seen when the respiration is suspended, and when the external jugular vein is compressed upon the posterior edge of the sterno-mastoid muscle. If the right ventricle is dilated, a feeble impulse or a mere flutter is felt in the epigastrium, which is more distinct at the extreme of expiration than at any other stage of the respiratory movement. To the evidence afforded, by jugular pulsation, of tricuspid incompetency there is soon added, if it does not already exist, that of general dropsy. When the pulmonic valves are incompetent, extreme breathlessness is felt on the slightest exertion, and paroxysms of panting breathing are, independently of exertion, apt to arise, during which the countenance of the patient becomes distressingly pale and betrays an expression of the greatest anxiety.

Of the general symptoms, the most prominent one is, as it has already been shown, a feeling of the most complete muscular debility. The sense of prostration is indescribably great. Where there is no valvular lesion, the breathing is nevertheless rendered short and hurried on the least exertion. The patient, after making the least effort, sinks into a chair, complaining of faintness, and gaspingly exclaims that "it is too much" for him. Hence the indisposition of the patient to move about.

In almost every instance the temperature of the skin is below the natural standard; nevertheless, there is frequently, especially when the patient is a female, a hypersensibility of the cutaneous nerves, which is resolved into acute pain upon the slightest pressure, and which renders the patient so sensible of the merest change of temperature, that the admission of fresh, cool air into the apartment is studiously avoided. A gentle tap upon the skin, the mere grasp of a part, or even the pressure of a finger upon any part of the surface, is followed by extravasation of blood, which is exceedingly slow in being absorbed.

The general hue of the countenance is a dirty pallor, and a faint, slaty-blue deepens in the early stages the natural colour of the mucous surfaces, which gives place to a deeper blue of the lips and of other parts when valvular lesion is afterwards superadded.

The appetite is variable—never large—always, perhaps, below the healthy standard. Still, food is taken every day in moderate quantity. Uneasiness of the stomach generally follows the ingestion of food, and flatulent distension often adds to the miseries of the patient.

The bowels are generally more or less torpid, and the evacuations darker than natural, thus showing the attempt on the part of the liver to depurate the blood by removing an excess of carbon in its secretion.

Like the bodily functions, the mental manifestations are low. Depression of spirits, gloomy anticipations, and a nervous anxiety about particular sensations, especially the sensation of cold, are the leading features of the mind.

(To be continued.)

FEEDING BY THE NOSE IN ATTEMPTED SUICIDE BY STARVATION.

By D. ANDERSON MOXEY, M.D., M.R.C.P., &c.

In The Lancet of March 20th and 27th, 1869, I published an article on "The Administration of Food and Medicine by the Nose, when they cannot be given by the Mouth," at the conclusion of which occurs the following remark: "I should not have ventured to advance so much in favour of this plan of administering food and medicine, were it not, as I believe, comparatively unknown to, or at least untried by, the bulk of the profession." This statement has since been called in question; but were I to repeat it now—more than three years after the publication in this widely-circulated journal of my own essay; nearly three years after Dr. Tennent's "Note on Feeding by the Nose in Fever," in the *Glasgow Medical Journal* of November, 1869; and after Dr. Hitchman's more recent testimony in

favour of Nasal Feeding in cases of Self-imposed Abstinence among the Insane, in the Report of the Derbyshire County Lunatic Asylum for 1871—I would still be *en règle*.

I have not far to seek for a vindication of this assertion, for, in the face of the well-authenticated existence of an easy, simple, safe, and certainly successful method of feeding, and saving alive, cases of attempted self-starvation, here we have, only a few weeks ago, in one of the largest county gaols in England, a murderer balking justice by starving himself to death, in the presence of, and in spite of, a number of officials, who had only to lay him flat on his back, render him motionless by force of numbers, put a funnel into one of his nostrils, and pour thereinto as much nutriment, fluid or semi-solid, as would fill his stomach. These officials had only thereafter so to control his hands that he could not put his fingers into his throat and excite vomiting of the ingested food, to render such administration absolutely successful. All this could have been easily effected in the space of a few minutes, could have been repeated as often as desired, and not a mark need or ought to have been left on the man's person. Such is what should have been done. Let us see what was done. The following paragraph appeared a short time ago in one of our daily newspapers. As my object in reflecting on what is past is only to effect good in the future, I purposely omit from the notice all names of persons and places.

"THE SUICIDE OF A MURDERER.—Our correspondent telegraphs as follows:—An inquest was held yesterday at the County Gaol on the body of ——, who died in the prison on Monday afternoon from the effects of voluntary starvation. He was sentenced to death fifteen days ago at the —— Assizes for the murder of ——, a woman with whom he cohabited, and was to have been executed on the day he died. Mr. ——, surgeon of the gaol, said that since the time deceased received sentence he had persistently refused to take food. On Saturday, when he had been without food three days, the witness injected about a pint of gruel and mutton broth into his stomach by means of the pump. —— made so great efforts to resist that the tube had to be withdrawn, and he afterwards put his fingers into his throat, causing him to vomit the food which had been injected. On making a post-mortem examination, the witness found all the organs healthy. He considered the cause of death to have been exhaustion from want of nourishment. The jury returned a verdict that '—— died from exhaustion, produced by wilful abstinence from food.' The —— *Evening Express* says:—'The man ——, who was sentenced at the last —— Assizes for the wilful murder of ——, and who has since been confined in the county prison, died from exhaustion at about a quarter to three o'clock yesterday afternoon. The conduct of the man since he received sentence of death has been violent, and in every way most extraordinary. He was condemned on Thursday, the 1st inst., and on that night refused to take anything either to eat or drink. On the first night the governor of the prison did not think there was any determination on the part of the prisoner to refuse food, but that his appetite had merely forsaken him, for the time being, through the severity of the sentence. On the following day, however, —— still persistently refused to eat anything, and the governor called the attention of the surgeon to the matter. The surgeon advised that he should be tried to the breakfast time the following day, and if he still continued in his determination to reject his food means should be taken to compel him. Contrary to the expectations of the surgeon, he still held out, and it was decided to bring the stomach-pump into requisition. Up to this time the man had conducted himself with more sullenness than violence; but when he saw the surgeon and his attendants at the door of the cell, with the stomach-pump, he seized a stool, and, swinging it over his head, swore he would knock out the brains of anyone who attempted even to enter his cell. They were thus held at bay for some time; but the warder who had been in attendance on him watched his opportunity, and seized the prisoner round the arms and body, and pinioned him while the surgeon and his attendants succeeded in placing the pipe of the instrument down the man's throat. Finding himself baffled in his attempts not to allow the use of the instrument, he now became exceedingly violent, and worked his head about in so ferocious a manner that the interior of his throat was lacerated so much that the surgeon found it useless to attempt to use the pump again. After this the prisoner's boots were removed, and slippers supplied to him, for, seeing the mood he was in, it was thought he might make use of them as weapons of violence. On the day following, as indeed on every day since his sentence, the governor endeavoured to induce him to partake of food, and sent to his own residence for tea and bread and butter to give the man. This was also refused, —— taking just a sufficient quantity of the tea to moisten his throat and his lips, but leaving the solids entirely untouched. When stimulants have been tendered him in gruel or other compounds, he has always refused—sometimes even with oaths—to receive them. The Roman Catholic chaplain of the prison has been in daily attendance on him, and, like the rest of the officials of the prison, has done his utmost to get the man to eat, but, of course, without success, and his allusions to the things of eternity were, it is only natural to suppose, treated with the same contempt. With such a course it was impossible for the man to survive long, and he died, as we have said before, at about a quarter to three o'clock yesterday afternoon, having become somewhat emaciated through want of food.'"

After perusing the above, we can fancy some kind-hearted but illogical reader exclaiming—"Well, never mind; the torture the poor wretch underwent, from the laceration and subsequent inflammation of his throat by the use of the stomach-pump, must have been almost as bad as hanging him; he sufficiently expiated his crime after all!" This, however, is not the point. It is a social, not an individual question. The murderer's crime is not to be condoned by the murderer's self-chosen oblation on the altar of any theoretical justice; but the actual sentence of doom has to be carried out according to the strict letter of the law. In such cases we have to do with the individual, not as an individual, but as the victim appointed by society to expiate in his own person, and in the manner it has ordained, the crime he has committed. So long, therefore, as society demands the murderer's life, and the laws of the country back up that demand, so long is it necessary that those who in their public capacity have the direction of the medical and hygienic treatment of the condemned should be expected and required to use all the means that science or the published experience of others has placed at their command to prevent any miscarriage of so-called justice.

If anyone were to ask me to name the worst possible treatment for suicidal starvation, I should say unhesitatingly—"Forcible feeding by means of the stomach-pump." Yet this was the procedure adopted in the foregoing case. Let us see what others say of it. Dr. Tennent remarks: "The use of the stomach-pump presents at the outset the difficult and disagreeable necessity of forcing open the mouth for the introduction of the gag, the patient meantime contending against and obstructing the efforts of the physician. Even after the gag is introduced, he can constantly gnaw it; and thus there is always existing an incentive to resistance. The exhaustion induced thereby is sometimes very great, and may even cause death by syncope. Dr. Russell has met with such a case, in which death occurred immediately after the passing of the tube, which was violently resisted, and before it could be withdrawn, much less used." Dr. Hitchman observes: "Those who can remember the large screw-gags which were formerly used to wrench open the mouth of the unwilling patient; who are familiar with the struggles and the risks which accompanied the use of the œsophageal tube, even after the perforated gag, at the cost of bleeding lips and gums and broken teeth, had been safely secured within the mouth; or even those who are familiar with the ingenious substitutes which have, from time to time, been invented by various medical superintendents during the past twenty years,—must feel grateful to Dr. Moxey for having shown in his practice, and most lucidly unfolded in the pages of THE LANCET, that no instrument is required further than the smooth tube of a funnel to pass just within the nostril, and that all else is safely achieved by a simple arrangement of position on a bed or a sofa, this position being secured by the aid of four attendants."

The effect of this instrument in ——'s case was, "that the interior of his throat was lacerated so much that the surgeon found it useless to attempt to use the pump again." My impression from this statement—always, of course, subject to correction—is that the injury done to the man's throat was such, that it would have been

impossible to use the pump again; and that even had the man himself relented, and tried to eat, he would have been unable to do so, and must have died of starvation about the time he did, under any circumstances. I am the more inclined to this opinion when I recur to the experience of the late Dr. Conolly, who was so appalled by the dangers resulting from the forcible administration of food by the mouth that he sometimes shrank from ordering its employment. "He had been reproached for this," writes Dr. Hitchman, "and he has left on record, that in consequence of an inquest having been held on a patient who was pronounced by the jury to have died in consequence of refusing food, he was induced to look carefully through the old records of the asylum, and was struck by the circumstance that almost every patient to whom food had been forcibly administered had died within a few days or weeks of such means being resorted to; and he adds: 'I do not mean to conclude that they died in consequence of the application, although I have reason to suspect that such was sometimes the case.' 'I know,' he said, 'that patients have sunk immediately after the struggle.'" In reference to my system of nasal feeding, Dr. Hitchman goes on to say: "The plan above referred to, carried out as described, under judicious medical supervision, obviates all such sad disasters. It has been resorted to in this asylum many times during the past two years, and always with the happiest results."

I have introduced these references to my own writings, in order to place the system of feeding by the nose in such juxtaposition with, and contradistinction to, feeding by the mouth, as will convince every reader of the immeasurable superiority of the one over the other, and will warrant me in asserting emphatically that in cases of suicidal starvation, whether the patient be sane or insane, forcible feeding by the mouth ought henceforth to be abolished for ever. The nasal administration in such cases I would term "enforced alimentation," the oral "forcible alimentation." The one is accomplished by the exercise of individual *strength*, resulting in collective *power*; the other by the employment of individual *violence*, resulting in collective *force*. The one is effected through a channel over which the patient has no control, the other through a passage which possesses in itself immense powers of resistance. The one is carried out with perfect impunity both to the recipient and the administrators, the other can only be accomplished with danger to the operators and serious—often fatal—injury to the patient.

(*To be concluded.*)

REMARKS ON TRACHEOTOMY.

BY LLEWELYN M. THOMAS,
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EVERY practitioner has, during his studies in the dissecting and operating rooms, had the subject of hernia in all its bearings, anatomical and otherwise, brought prominently and repeatedly before his notice, and though he may have no special liking for surgery, or may even feel diffident as to his operative powers, yet it must occur to him that as a general practitioner, especially in country districts, he may at some future period of his career be brought face to face with a case of hernia urgently requiring operative interference, and with no possibility of his referring to authorities, or even obtaining the assistance and advice of another surgeon. How often, however, do we meet with poor creatures actually *in extremis*, who have been allowed to go from bad to worse, the medical man attending them wasting the precious hours in palliative measures, either not recognising the gravity of the symptoms, or lacking the moral courage to urge an operation, or even altogether overlooking the strangulation of the hernia.

Another operation requiring generally even more prompt decision than hernia is tracheotomy, and the necessity for its performance may occur to any man at any moment; the operation, however, is comparatively rarely seen in the theatres of our medical schools, and I believe its anatomical details are less forcibly and persistently brought before the notice of the student in the dissecting-room than are those of hernia. For these reasons it is probable that some may have scarcely considered the operation in all its bearings until perhaps brought into contact with a case requiring an artificial air-passage, and then from want of previous consideration have found themselves in a dilemma, and though perhaps convinced in their own mind that they ought to operate, have yet feared to decide that an operation is quite "the correct thing." I remember the case of a man being admitted into a hospital with syphilitic ulceration of the larynx. He stood a laryngoscopic examination previous to admission, but that evening spasmodic breathing suddenly came on, and he was unfortunately allowed to die without operation. On the other hand, I remember a child being brought in who had a few days previously indulged in the luxury of sucking at a kettle of boiling water; its breathing was terribly impeded, and it had all the symptoms of œdema of the glottis. Three surgeons and a physician happened to be in the ward, and they all agreed that tracheotomy was imperative. The instruments were sent for, but in the interim that child most perversely began to breathe freely, and subsequently recovered with its trachea intact. A general practitioner informed me of a case in which he called in a consulting surgeon to see a child with what proved to be laryngismus stridulus; the surgeon wished to operate immediately, but a delay was urged by the parents, and that child also began speedily to breathe easily. It appears, therefore, that great skill is requisite in deciding on the necessity of operative interference in laryngeal cases, much more, in fact, than in hernia, which must be treated almost dogmatically; if you are certain of strangulation, even though the symptoms are not very urgent, and you have tried gentle taxis, ice, and chloroform without avail, do not trust to time and patience, but operate!

With regard to tracheotomy in croup, opinions differ immensely, and the evidence is conflicting; but this may be said that in England, at any rate, the operation is generally put off till the case is desperate, either in deference to the objections of the parents, or for other reasons, and therefore the operation rarely has a fair chance of success. Many surgeons appear to have an objection to the use of chloroform in tracheotomy; but it greatly relieves the spasm which is nearly always present in these cases, and I believe it to be almost impossible to operate safely on young children without its use; the patients may become livid and appear to be dead or dying at the close of the operation, but when air obtains access to the lungs they speedily recover.

The depth of the trachea in children cannot be too carefully borne in mind, and also the looseness of the areolar tissue and fascia round the trachea, which permits of the tube being pushed down in front of the trachea most readily, as I have seen occur.

A case which has happened in this hospital will illustrate some of the foregoing remarks. A man aged forty-four was admitted with great obstruction to his breathing; he made continuously, both asleep and awake, a loud, harsh, roaring, laryngeal noise, which could be heard at a distance of some yards; his face was pale and somewhat blue, his mouth always open, and eyeballs prominent and staring. He appeared, however, in some measure inured to his condition, and his state was never positively urgent. He spoke in a hoarse whisper, evidently with difficulty, and was troubled with phlegm which was unmixed with pus. He stated that he had been hoarse and impeded in his breathing for twelve months, but that only during the last six or seven weeks he had continually been roaring; no syphilitic history. His troubles came on gradually; at no time had he suffered pain, and he could freely bear pressure on the larynx. I examined him several times with the laryngoscope, but failed to see the vocal cords or the interior of the larynx satisfactorily; the epiglottis appeared to be rigid and to impede a proper view. He stood the examination well, as he had been examined at two other hospitals frequently. There was no evidence of aneurism or other thoracic tumour—in fact, the continual laryngeal noise pointed rather to local disease than to pressure on the recurrents. It was decided, as there was apparently no immediately urgent danger, to operate on the regular day, and thus give him the benefit of a consultation. He was in the hospital four or five days, and derived ease from a morphia, ether, and squill draught. I saw him on my rounds one evening,

and spoke to him at 8.30 P.M., and at 9 P.M. a patient called the nurse, and said he could not hear him breathing: he had died apparently without a struggle. At the post-mortem the larynx was removed, and there was practically no opening through the glottis, the parts being so swollen and infiltrated; the larynx was divided with scissors, and in the middle of the cricoid cartilage, posteriorly, a small abscess the size of a pea was cut through; this was apparently between the cricoid and its perichondrium; its walls were ossified. The vocal cords were tightly strung over the surface of the mucous membrane, leaving a mere chink. This appeared to be all the mischief, but on passing a probe into the right sacculus laryngis, the upper surface of the cricoid was felt bare, ossified, and carious, and on opening the right crico-arytenoid joint, both surfaces were in the same state, resembling the carious surfaces of a diseased knee-joint; much of the cricoid was ossified; the thyroid was totally unaffected. The state of the vocal cords and the general swelling explained why nothing could be seen laryngoscopically.

If this man's trachea had been opened the parts would have been comparatively at rest, the crico-arytenoid joint would possibly have become anchylosed, and the cricoid abscess would possibly have dried up. What voice he would have recovered I do not feel prepared to give an opinion upon, but almost certainly his life would have been saved. As he had attended at two other hospitals, the case was evidently not considered urgent, but it gives a lesson that a patient with persistent stridulous breathing owing to laryngeal mischief, whether ulceration, polypus, or necrosis, is not safe without a tube. It is also remarkable that he never suffered pain even on pressure, or dysphagia.

Had laryngotomy been performed instead of tracheotomy, it would inadvertently have been a wrong selection, as the tube would have been in close proximity to the diseased upper margin of the cricoid, and so would have most probably aggravated the disease.

CASE OF

HYDATIDIFORM DEGENERATION OF THE OVUM COMPLICATED WITH HÆMORRHAGE; REMOVAL OF THE MASS.

BY WILLIAM C. WISE, M.D. ST. AND., L.R.C.P. LOND., &c.

M. A——, aged twenty-eight, married, four children (youngest ten months, still at the breast), last catamenia two months, consulted me on October 3rd, 1871, for a discharge of blood from the vagina which had taken place at the same hour for several days prior to her seeking advice. She estimated the quantity discharged each time at from two to four ounces. She had also vomited every morning for two months. The vaginal examination showed the os to be patulous, and the cervix short and plastic, but the speculum revealed no ulceration or other lesion. I diagnosed early pregnancy, directed her to wean the infant, and prescribed rest and the acid infusion of roses with dilute sulphuric acid. As the bleeding continued, in a few days I gave gallic acid in five-grain doses every four hours, and advised her to suck ice and take iced drinks. This treatment being of no avail, I gave ten minims of the solution of extract of ergot (P.B.) with fifteen minims of the tincture of perchloride of iron three times a day, hoping either to stop the bleeding, which had now (Oct. 24th) much increased, or induce the womb to expel its contents; but neither of these results occurring, I substituted for the ergot and iron ten minims of the tincture of cannabis indica three times a day, and ordered vaginal injections of alum. No improvement taking place, the case was now seen by Dr. Mason, of Finsbury-square, London, who ordered fifteen minims of tincture of perchloride of iron three times a day, and a free supply of Wenham-lake ice, and considered that this treatment persevered in would eventually stop the bleeding. At the end of a fortnight the general health, which had previously suffered much, was improved, and the hæmorrhage, although not stopped, was certainly less. At a second consultation with Dr. Mason, as there was a certain periodicity about the discharge of blood, he suggested that two grains of quinine be given with each dose of the tincture of perchloride of iron. This was on December 7th, and on the morning of December 8th, on my visiting the patient, she told me she had had bearing-down, forcing pains since 4 A.M. at regular intervals. On examination, I found the os dilated to the size of a florin, and a soft, firm, flesh-like substance, which I could not break down, planted over the mouth of the womb. There was still hæmorrhage, though slight, which came and went with every pain. After waiting some hours and finding no progress, I gave two half-drachm doses of ergot at an interval of two hours, neither of which appeared to have the slightest effect. I now called in Mr. Mason, F.R.C.S., of Woolwich, who placed the patient under the influence of chloroform, while I with great difficulty worked my hand through the placenta-like substance planted over the mouth of the womb, into the cavity of the latter, from which I scooped out a large wash-basin half full of hydatid cysts (so called), which resembled a large number of white grapes floating in claret. There was not the slightest trace of any ovum unless the fleshy mass referred to represented the placenta. We got good contraction of the uterus, the patient slowly regained her strength, and was quite convalescent by the end of a month.

Barrage-road, Plumstead, S.E.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

UNIVERSITY COLLEGE HOSPITAL.

PSOAS ABSCESS; ACUTE TUBERCULOSIS; DEATH.

(Under the care of MR. ERICHSEN.)

THIS case is one that throws some light on the origin of tuberculosis. Since Villemin first announced that tubercle may be introduced into the lungs and other organs of the body by inoculation, the views on the pathogeny of tuberculosis have undergone great changes both in this country and on the continent. It is, however, chiefly owing to the advocacy of Buhl and Niemeyer in Germany, and to the results of experiments carried on by Drs. Burdon-Sanderson and Wilson Fox in this country, that the origin of tuberculosis from a pre-existing inflammation has come to be regarded as a fact. The only point under dispute is, whether every tuberculosis has such an origin; some observers answering in the affirmative, while others as positively deny this to be the only mode of origin. In all cases, however, it is acknowledged that there must be a certain predisposition in the patient to the acceptance of this condition; this predisposition Niemeyer calls a vulnerability of the constitution. The facts appear now to be too numerous to allow of the sequence of events being attributed to a coincidence.

William T——, aged twenty-three, said that up to two years before admission he was quite well, but that about October, 1869, he suffered rheumatic pain in the hip and lumbar region of the left side. For this he was treated at the Great Northern Hospital, and in about two months got well. About October, 1870, he felt some weakness in the back, so that he was unable to rise from the horizontal position without using his arms. In January, 1871, he had a severe cough, and spat up a large quantity of mucus, but no blood. He then lost appetite, and suffered pain in the chest. At the end of February of the same year he noticed a swelling in the left groin, and a week after this a swelling in the left lumbar region. These increased in size rapidly for three weeks, but since then have not grown much. At this time he was ordered cod-liver oil. At the beginning of July, 1871, he had a return of the rheumatic pains, but this time in the fingers and in the forearm of the right side. At the end of October he felt pain as of a cord tied tightly round the abdomen. At the time of admission, Nov. 1st,

1871, he had severe cramp-like pain, which radiated from the right hip down the outside of the thigh to the upper part of the calf. On Nov. 3rd he was examined, and it was found that he had a large, soft, but not circumscribed, swelling in the left groin below Poupart's ligament, and outside the femoral vessels. The swelling could be reduced by pressure, and fluctuation detected by palpation over the region of the psoas muscle above Poupart's ligament. There was another soft swelling as large as an orange in the left lumbar region, extending between the last rib and the iliac crest, and about one inch from the spinal column. When this was compressed, the swelling in the groin increased in size and tension, and *vice versâ*. When standing, the patient kept the left thigh slightly flexed, although he could straighten it. Over the tenth dorsal vertebra, which was prominent, and at the lower lumbar region, there was great tenderness. Impulse on coughing was perceptible in the psoas abscess, but not in the lumbar; but on emptying the lumbar abscess by gentle pressure, an impulse given to the psoas abscess could be felt in the lumbar one.

Nov. 6th.—In the afternoon the lumbar abscess was opened under carbolic spray, and about six ounces of pus evacuated; the psoas abscess was partly emptied through the lumbar.

7th.—11·30 A.M.: Temperature 99·5° F.—8 P.M.: Temperature 100·7°. To have a purgative pill at bedtime.

8th.—11 A.M.: Temperature 98·7°.

13th.—Very slight discharge of a serous character.

14th.—Complains of dragging pains along the spine and in the supra-clavicular region on taking deep inspirations.

15th.—The pain in breathing has gone. Last night the cough was troublesome, but it is better to-day. Temperature normal; breathing rapid.

16th.—For the last three mornings, at about four o'clock, there have been severe sweatings. Breathing easier. To have two grains of sulphate of quinine and ten drops of dilute sulphuric acid three times a day.

20th.—Breathing more oppressed; cough troublesome; large quantities of mucus expectorated; great pain in epigastrium.

22nd.—Cough about the same. Ordered a mustard poultice to be applied to the chest, and to take a draught consisting of fifteen drops of ipecacuanha wine, ten of spirits of chloroform, ten of tincture of squills, and five grains of carbonate of ammonia, three times a day.

24th.—Cough still troublesome. The discharge from the abscess in two days is only about a teaspoonful of serous fluid.

27th.—Cough nearly all gone; no pain in the chest. The sweating is not so profuse.

Dec. 9th.—No discharge in the dressings. There is still tenderness in the spine, but it is less. Patient sat up for two hours yesterday.

12th.—Sits up daily; cough slight; sweating much diminished.

30th.—A pain which he complained of for several weeks at the inner side of the thigh has gone, but there is still tenderness along the spine.

Jan. 19th.—Bowels confined; complains of headache. To have a saline aperient draught.

23rd.—Has had a headache for a week. On the 20th he was sick, and has continued so. The vomited matters are bitter and clear; appetite bad; some tenderness below the costal cartilages in the right hypochondriac region. The saline aperient draught to be repeated.

26th.—The quinine mixture has been vomited for some days past; there is a very severe occipital headache; tongue moist, pink, and only slightly furred; countenance dull and earthy-looking; vomiting continues. Temperature at 11.30 A.M., 99°; at 1.30 P.M., 99·2°.

27th.—Headache and vomiting persist.—11 A.M.: Temperature 99°. The patient sees double; there is no evident strabismus, but there is slight ptosis of the right eyelid. The pain in the head runs round in the line of the eyebrows from the back of the head; now and then there are paroxysms of pain. The sickness is not relieved by vomiting. Ordered a cantharides blister to the nape of the neck, ice to the head, an enema daily, to have ice to suck, and to take twenty drops of the solution of morphia at bedtime.

28th.—The diplopia continues; the images are of equal intensity, but one is placed just above the other. The patient lies with the legs drawn up; abdomen somewhat retracted.—11.30 A.M.: Temperature 100°; pulse 58.

29th.—He seems to be semi-comatose; answers when spoken to; is constantly muttering to himself, and draws up the bed-clothes and bites them.—11 A.M.: Temperature 99°; pulse small, 80.

30th.—The patient died at 2 A.M. Just before death he had hiccough and vomited blood. After death the pupils were noticed to be unequally contracted.

Autopsy.—On removing the dura mater the surface of the brain was found to be dry; veins greatly distended and convolutions flattened. The ventricles were greatly distended with fluid, and on opening them the septum lucidum was seen as a delicate membrane. The grey matter was very dark, and contrasted strongly in colour with the white substance. There were abundant grey granulations along the vessels in the fissure of Sylvius, and a few were to be seen elsewhere. There was a large quantity of lymph at the base of the brain, especially about the nerves. The heart and pericardium natural; both pleuræ adherent throughout by recent lymph, which was easily torn; lung-substance dense and congested. On section grey granulations were seen uniformly distributed from apex to base. There was some consolidation and caseous matter at the right apex. The peritoneum, especially over the surface of the liver, spleen, and mesentery, was scattered over with grey granulations. Grey granulations were found in and on the liver, and here and there some larger masses of yellow tubercle were to be seen. Spleen large, vascular, and soft. The kidneys were soft and friable, and some grey granulations were scattered through the right one. The stomach contained about a pint and a half of chocolate-coloured fluid. Mucous membrane congested and soft, with numerous patches of capillary hæmorrhage, especially in the region of the pylorus; no ulceration could be detected. In the intestines a few tubercular ulcerations were seen. The testicles and bladder were healthy, but a cheesy mass was found in the prostate. On removing the peritoneum the psoas abscess on the left side was seen immediately beneath the fascia of the psoas muscle, and could be traced along the outer border of this muscle to the brim of the pelvis, where it crossed to the inner side and ran along the femoral artery as far as the profunda. About the middle of this course an offset passed backwards above the iliac crest; this was the abscess that was opened in the back. Joining this was another abscess which passed under the psoas, and ran along the brim of the pelvis below the muscle, till it joined the first one. On the right side was another abscess, reaching from the third lumbar vertebra downwards to half way along the brim of the pelvis. This abscess communicated with that of the opposite side, at the level of the body of the fourth lumbar vertebra. An abscess also passed down the front of the sacrum as far as the third piece. The bodies of the third, fourth, and fifth lumbar, and upper three sacral vertebræ were almost bare, being covered with only a thin layer of granulations, through which spicula of bone could be felt. The intervertebral substance between the three upper lumbar vertebræ seemed healthy, but that between the last lumbar and first sacral had disappeared, there being in its place a large cavity containing masses of diseased bone. The abscesses contained a thick creamy matter of a yellowish colour, and of the consistence of cream-cheese.

HOMERTON FEVER HOSPITAL.

THE COLD BATH IN THE TREATMENT OF ENTERIC AND TYPHUS FEVERS.

(Under the care of Dr. ALEXANDER COLLIE.)

WE now complete the cases treated by the cold bath at this hospital. The following cases do not argue so much in favour of the cold-bath treatment as those we published last week, yet they are not without interest, and at least hint a caution. The subject is worthy of a much more careful investigation than it has hitherto received; it is, however, to those who have charge of large hospitals, where this treatment can be easily carried out, that we must look for information.

Case 5 was a woman, aged thirty-eight, suffering from typhus fever. On the eleventh day of the disease she had had hardly any sleep from the commencement of the attack; eruption abundant; tongue dry; a few râles were to be

heard through both lungs; temperature 104·4° F. After being twenty minutes in a bath of 90° to 70°, the temperature had apparently risen to 104·8°, but in the next ten minutes, the bath being lowered to 60°, it had fallen to 103°. Directly after the bath the patient slept for two hours and a quarter; eight hours after the skin was moist and covered with perspiration, the temperature being 104°. On the twelfth day of the disease the bath was repeated, and in thirty-five minutes the temperature was lowered from 104·2° to 102·2°. As no sleep followed the bath an opium pill was ordered, but without effect. Next day the patient had four hours' sleep after an opium pill, and the bath was not given. On the fourteenth day of the disease the temperature was lowered, after a bath of 90° to 60° for twenty minutes, from 104·8° to 104°, but the bath having been lowered in the next twenty minutes to 56°, the temperature fell to 102·6°. Sleep did not follow this bath, and the reaction was slow, the patient expressing herself as feeling "cold" for some time after. A few hours after the bath one ounce of whisky every hour was ordered. At 2 A.M. on the fifteenth day, the pulse was 136, stronger, and the patient had had intervals of sleep of about twenty minutes at a time, and on half a grain of opium being administered she slept three hours. On the morning of the sixteenth day the temperature was 104·2°; pulse 140, full and strong; the eruption well marked. The whisky was now reduced to twelve ounces in the twenty-four hours. The baths, not being considered satisfactory in their result, were not repeated. In the evening of the same day there was some increase of the bronchitis, for which she was ordered a mustard, to be followed by a "jacket, poultice," and to take one ounce of an ammonia and senega mixture every three hours. Notwithstanding constant feeding and stimulation she gradually sank, and died at early morning of the nineteenth day of the disease.

(Under the care of Mr. PERCIVAL.)

Case 6 was a woman aged twenty-four, admitted on the ninth day of the disease (Dec. 16th), with enteric fever; temperature 104·6°, pulse 140.

Dec. 17th.—The morning temperature of 105·2° was lowered to 101·2° by a bath from 80° to 56° in twenty-four minutes, and the patient slept soundly for some time after; in the evening, however, the temperature had risen to 104·6°.

18th.—In the morning the temperature was 105°, but fell to 98·4° after a bath cooled from 82° to 56° in twenty-three minutes. Slept well after the bath. To have twelve ounces of whisky per diem. Temperature in the evening 105·2°.

19th.—Morning temperature 104·4°, which a bath from 80° to 56° in twenty minutes brought down to 99·4°. The patient slept well after this bath, but as in the evening the temperature had risen to 105°, another bath from 86° to 52° in twenty-seven minutes was given, after which the thermometer in the rectum registered 101·2°. Great depression, from which the patient was with difficulty roused by enemata of whisky and beef-tea, as she could not retain anything on the stomach, followed this bath; nor did sleep ensue.

20th.—Temperature in the morning 103°, evening 104·8°; but no more baths were given, on account of the alarming depression produced by the last one. Râles at back and both sides of the chest.

22nd (fifteenth day of illness).—Temperature (evening) 105·8° after profuse diarrhœa during the day. The patient in a state of extreme exhaustion; a sloughing sore between the folds of the nates. Enemata of starch and opium ordered for the diarrhœa.

From this time the patient slowly improved; the sores cleaned and rapidly healed. Patient discharged in good health on Feb. 15th, 1872.

These cases are too few in number to justify any definite statement as to the indications for or against the cold-bath treatment in acute disease. There is no evidence that the course of these specific fevers is shortened by such treatment; on the contrary, the evidence points rather the other way, but in this may consist its chief remedial value, as the pace of the disease is, as it were, modified, so that the system gets regular intervals of rest, and is thus enabled to bear up against what might otherwise be fatal. This is not by any means a novel mode of treatment; for as early as the year 1702, Floyer strongly recommended it; and, in 1729, Hoffman said that, "employed freely and not too cold, it is the best remedy in acute diseases, and in chronic diseases one must prefer it to all other means." From this time to 1801 it was advocated by the German authorities Sigismund, Hahn, Unzer, Zimmermann, and others, when a new impetus was given to it by Dr. Currie, who adopted this treatment very extensively and successfully at the early part of the present century. It must, however, be remembered that Currie began his treatment often before a correct diagnosis could be made; and there is no evidence, in a large number of his cases, that the febrile states would have developed into any serious specific febrile disease. This practice did not continue long, and excepting isolated observations—such as those of Drs. Wilson Fox, Stallard, and Weber,—it has, in this country, ceased to be employed by the regular profession in acute diseases. It is of great importance to determine, not only that cold-water baths will reduce temperature in certain well-defined acute diseases, but whether this reduction of temperature is followed by other good results.

GREAT NORTHERN HOSPITAL.

A CASE OF CHOLERA TREATED BY CALOMEL; RECOVERY.

(Under the care of Dr. HARDINGE.)

THE notes of the following case are communicated by Mr. Theobald W. T. Williams, house-physician.

With an epidemic of cholera threatening us, anything that throws light on the treatment of this malignant disease ought to engage our attention. The following case seems to have been a severe one, and the treatment adopted effective. From a single case like this, it would be absurd to come to a settled conclusion, for is is well known that treatment varying from the free administration of powerful astringents on the one hand, to copious purgatives on the other, have been about equally successful when large numbers of cases are taken. Nevertheless, we record this case as one of therapeutic interest.

Alfred R——, aged twenty-one, a drover, was brought to the hospital on July 29th by the police, having been found in the street unable to move. He was suffering from severe cramps in his limbs and abdomen, constant vomiting, and, as he sat in the surgery, he was purged unconsciously, a fluid almost like pure water running away from him continually. His voice was whispering, and his face and lips of a bluish tint, and he complained of excessive thirst. He was admitted, and ordered fifteen grains of calomel at once, and a mixture containing bicarbonate of soda, kreasote, and tincture of kino, every four hours. He vomited a little after the first dose, but not afterwards. A quarter of an hour after the first dose of calomel three more grains were given, and half an hour after this five more grains, to be repeated every four hours until there was an appearance of bile in the stools. Soda-water and milk were given to allay the thirst, which seemed to be very distressing. When the five-grain dose of calomel had been repeated three times, a greenish tinge was observed in the motions, and at the same time the cramps became less severe, and altogether the patient seemed better.

July 30th.—Bowels opened twice. No vomiting or cramps. Mixture to be discontinued.

Aug. 3rd.—Patient discharged perfectly well.

Altogether thirty-eight grains of calomel were given in about thirteen hours, but not a symptom of mercurialism was produced. No stimulants were allowed.

BEQUESTS TO MEDICAL CHARITIES. — Mr. James Garrett Frost has bequeathed £5000 to the Royal Infirmary, Manchester; £3000 to the Salford Dispensary; £2000 to the Manchester General Hospital and Dispensary for Sick Children; £2000 to the Barnes Convalescent Home, Cheadle; £1000 to the Manchester Royal Eye Hospital; £500 to the Chorlton-upon-Medlock Dispensary; £500 to the Ardwick and Ancoats Dispensary; and £500 to St. Mary's Hospital and Dispensary. The late James Plunkett, Esq., of Dublin, barrister-at-law, by his will, among other charities, has bequeathed £3000 Consols to the Mater Misericordiæ Hospital, £2000 to St. Vincent's Hospital, and £500 to the Hospital for Incurables.

Reviews and Notices of Books.

Invalid Cookery, suitable to the Cottage or the Kitchen. Containing a few simple Rules for successful Cooking, and a few plain Receipts for the Food required by Invalids. By METCALFE JOHNSON, M.R.C.S.E., &c., author of "Hedonism," &c. Lancaster: Milner. 1872.

AN eminent philosopher with whom we have the honour of being acquainted maintains, occasionally with unnecessary vehemence, that the sufferings of sickness are more than compensated by the pleasures of convalescence. In the opinion of this great authority any malady which does not entail downright amputation is a mere trifle when compared with the exquisite sensations experienced by the convalescent when he finds his appetite reviving—at first languidly, then daintily, and finally asserting itself in an imperious fashion unknown to those miserable mortals who crawl through life without attaining the happiness of being ill.

Not only to the guardians of well-beloved *malades bien portants*, but also unto the "ministering angels" of those whose fate is still trembling in the balance, are the timely words of Mr. Metcalfe Johnson addressed. Invalid cookery is indeed a serious subject, especially when it is borne in mind that medical treatment is daily drifting farther from the Pharmacopœia, and more and more towards dietetics.

The successful preparation of food for the sick demands the fulfilment of two important conditions—(1) that the food shall be so simple in its character, and so carefully dressed that a disorganised stomach shall have no excuse for rebelling against it; and (2) that the food (liquid or solid) shall not be utterly insipid, but shall have sufficient flavour and daintiness, even of appearance, to stimulate a languid palate. These two conditions are not to be achieved without the exercise of great care, and some little of the culinary skill which unhappily is by no means widely disseminated in the British islands.

The stupendous blunder of those who have the care of invalids is that of presenting them with dainty morsels or tit-bits, owing their agreeable quality to the presence of spices or of fatty matter; and another if possible greater error exists in the belief that viands cooked in the barbarous English fashion—barely endurable even by persons of robust digestive powers—can be otherwise than disgusting to the delicate palate and ticklish stomach of a sick person. The mutton chop, so eternally recommended, and when properly cooked so digestible and appetising, is frequently presented to the hapless patient as a hideous lump of meat, fat withal, burned or smoked on the outside, and excessively underdone, not to say blue, on the inside. One slash of the knife into a chop of this kind severely tries the most robust appetite, but entirely extinguishes all desire for food on the part of an invalid. We cannot help thinking that the thickness for a chop recommended by Mr. Metcalfe Johnson—i.e., one inch and a half—is excessive, and that the risk of imperfect cooking is greatly enhanced by this unnecessary density. We have ourselves invariably found in practice the small neck cutlets, denuded of their fat and broiled over a clear coke fire, not only easier to cook properly but more appetising in their appearance when cooked than the traditional loin chop.

Boiled chicken is such a permanent "institution" of the sick-room that many people protest that the very sight of it makes them feel delicate on the spot. Mr. Metcalfe Johnson gives a good-enough recipe for boiling a fowl in the plainest manner, but will perhaps forgive us for reminding our readers that plain artless boiling is very apt to produce a yellowish slimy-looking chicken. Before cooking, the bird should always be well washed in tepid water and lemon juice, and to ensure extreme whiteness, delicacy, and succulence, should be boiled in a paste made of flour and water, and, moreover, after being put into the boiling water, should be allowed to boil or rather simmer very slowly. This method is very effectual in preserving all the juices of the fowl, and the result is a far more toothsome and nourishing morsel than the luckless bird which has been "galloped to death" in plain boiling water. Mutton is also much better for being boiled in paste. It is almost needless to observe that the paste is a simple *appareil*, and should never be even shown to the patient.

In his various tables of diet Mr. Johnson delights us by sailing away from the well-worn conventionalities and boldly recommending fish—excepting, of course, salmon and turbot—as nourishing and attractive food for delicate persons. When, however, he recommends a "fried sole" we presume that he does not intend that the patient should eat the crisp outside part. No better dish for a sick person can be found than a sole well fried in an abundance of *boiling* lard; but the judicious nurse should remove the crisp exterior, and serve the white juicy fillets alone to the patient. Treated in this fashion a fried sole is certainly as wholesome as, and undoubtedly more attractive than, the traditional boiled one so rarely cooked with success.

Perhaps one of the best recipes for making beef-tea is that given in the little book before us; and the directions are so exceedingly clear that mistake and failure seem to be almost set at defiance.

Many of the recipes for stock-making, egg-boiling, the cooking of arrowroot, milk porridge, and various light puddings are thoroughly sound and practical, although we should not ourselves deem vegetables inadmissible in stock. The remarks of Mr. Johnson are not confined to cookery for adult invalids, as a considerable portion of his treatise is devoted to cookery for children and the dietetic management of young infants, while a valuable chapter is devoted to the dietary of the lying-in room. If the mothers of England can only survive the shock of being told that "in early life the stomach of a baby resembles that of a cat," and will be at the very slight trouble of perusing a neat practical treatise wholly devoid of professional jargon, they—in common with all whose duty it is to tend the sick—will confess a deep debt of gratitude to Mr. Metcalfe Johnson.

On the Functions of the Sympathetic System of Nerves as a Physiological Basis for a Rational System of Therapeutics. By EDWARD MERYON, M.D., F.R.C.P., &c. London: J. and A. Churchill. 1872.

THIS volume is a reprint (with additions) of a series of papers contributed to THE LANCET during the months of October and November, 1871. Its subject is perhaps the most interesting in contemporary physiology and therapeutics; and Dr. Meryon, by careful perusal of antecedent research, and not less careful independent investigation, has made a substantial contribution to the literature of the profession.

The first part leads up through an experimental induction to the demonstration that in all cases and in all organs, when the nerve-fibres of the sympathetic proper are in abeyance, and the motor nerve-fibres of the vaso-motor nerves are unchecked, hyperæmia of the capillaries is induced, and increased secretion the result; while, *vice versâ*, when the motor fibres of the vaso-motor nerves are in abeyance, and the nerve-fibres of Remak are unrestrained, anæmia of the capillaries is induced, and arrest of secretion the result.

On this physiological basis—not, indeed, for the first time established, but confirmed and reinforced by his indi-

vidual researches—Dr. Meryon proceeds to indicate certain innovations on the received therapeutics. Every ganglionic centre of the sympathetic system having three distinct elements over and above the ganglionic cells, and each element or nerve-fibre having its own special attributes, the *modus operandi*, he thinks, of many medicinal agents may be interpreted, and a rational system of treatment adopted. The experiments of Claude Bernard, of Heidenhain, of Stilling, and of Schiff, are laid under contribution to illustrate this part of the exposition, and the opposed effects of opium and hydrate of chloral on the cerebral circulation are set forth with much clearness. The one point on which his general acumen seems to fail him is the use of alcohol as a remedy in inflammation. Instead of a distinct opinion, he presents us with a series of alternative ones, plausible enough, no doubt, but not quite satisfactory to the practitioner who wants to prescribe. Further research, however, may lead Dr. Meryon to a more definite solution of this *vexata quæstio*. Meanwhile we accept the volume before us as at once an instalment of others to follow, and as an earnest as to the progressive value of their contents.

OUR LIBRARY TABLE.

Archives de Physiologie Normale et Pathologique. Publiées par MM. BROWN-SÉQUARD, CHARCOT, and VULPIAN. No. 4. Juillet, 1872. Avec 4 planches et 6 figures dans le text. Paris: G. Masson.—The physiology and pathology of the nervous system fills so many of the pages of this periodical as almost to suggest an organic change in its title. The names of its editors are so identified with the study of that system as further to reinforce the suggestion. Of the original memoirs, that of MM. Arloing and Léon Tripier on the physiology of the vagus possesses most of novelty for British readers; but Louis Ranvier's paper on the histology and physiology of the nerves, though a good deal of it is recapitulation, also deserves perusal. We recommend Dr. Halford of Melbourne, and all believers in the efficacy of ammonia injected into the veins in snake-bite, to read MM. Mathieu and Urbain's physiological experiments on the gaseous elements of the blood. M. Parrot's paper "Sur une pseudo-paralysie causée par une altération du système osseux chez les nouveau-nés atteints de syphilis héréditaire" is full of interest; while M. Durante on the Organic Action of Clot in the Vessels, and M. Renaut on Elephantiasis and the Lymphatic Œdemas, are communications which worthily sustain the character of the French school of physiologists.

Observations in Myology. By G. M. HUMPHRY, M.D., F.R.S. pp. 192. Cambridge: Macmillan.—This work includes the Myology of the Cryptobranchus Japonicus, Lepidosiren annectens, Uromastix spinipes, Mustetus levis, Ceradotus, Pseudopus, Pallasii, and the disposition of the muscles in vertebrate animals. The last section will probably prove most interesting to our readers, but the previous ones contain a large amount of information on subjects that have been but little studied. Dr. Humphry regards the muscular system of a vertebrate animal as consisting fundamentally of a succession of alternating transverse skeletal and muscular planes, extending nearly but not quite through the outer wall of the animal. In the lower fishes the simpler forms are found, and he traces the gradual increase in complexity that occurs as greater variety in the movements is required. The more important parts described are illustrated by rather rough but intelligible drawings.

La Chirurgie Militaire et les Sociétés de Secours en France et à l'étranger. Par M. LÉON LE FORT. Paris: Germer Baillière. 1872.—Another of the valuable contributions made by France to the library of medicine from the incidents of the late war. The present volume appeared in substance in successive numbers of the *Revue des Deux Mondes*. M. Le Fort, before serving as surgeon-in-chief to a grand ambulance in the army of the Rhine, had studied the organisation of military medicine in the Austro-Italian and Schleswig-Holstein campaigns. Since the peace of Versailles he has traversed Europe to inspect the ambulance systems of the several countries; and the volume before us embodies the results of his researches in a style clear, terse, and vivacious. Military surgeons and sanitarians, not in France only, but in the other states on either side of the Atlantic, will find in it much to interest them as well as instruct.

Salt and Son's Illustrated Catalogue of Surgical Instruments. 1872.—Messrs. Salt and Son have this year published an excellent catalogue of surgical instruments and appliances, copiously illustrated with accurate engravings. Surgeons can readily, on looking over the catalogue, find out the instrument they want, together with its price. We observe that a special surgical chest has been devised for volunteer medical officers.

REPORT
OF
The Analytical Sanitary Commission
ON
AUSTRALIAN WINES.

Of all the alcoholic beverages which the ingenuity of man has succeeded in manufacturing, there are none comparable to those derived from the grape. Vast as is the extent of land devoted to the culture and growth of the vine, and enormous as are the quantities of wine made, there is yet an almost unlimited field for the consumption of the medium qualities of wine, such as are best adapted for the use of the masses.

There are few finer wines than the best kinds of sherry and port, especially as consumed in the countries in which they are made and in their unbrandied condition. Unfortunately, however, in order to suit the taste of English consumers, and to render the wines less subject to change from climate and keeping, almost the entire stock of these wines imported into Great Britain is brandied, or rather (for brandy is often superseded) is fortified by the addition of spirit derived from sources other than the juice of the grape—as corn, beet-root, or sugar.

Now these fortified wines, unless mellowed by many years' keeping, and especially to palates unaccustomed to such fiery stimuli, are found to be burning, over-stimulating, and intoxicating.

The evils of the daily consumption of such beverages have of late years become more apparent, and are now more generally acknowledged; one great cause of this alteration being the recent reduction of the wine duties, which has afforded the British public the opportunity of tasting and becoming acquainted with a great variety of what are called the lighter wines. It requires only to know these wines, and to give them a fair trial, to ensure their being greatly preferred by all whose palates and stomachs are not spoiled by the prolonged use of the fortified wines.

But of these lighter imported wines some are of very poor quality, and the difference in alcoholic strength is in many cases at first too great for those accustomed to the heavier wines; and they are therefore not found, especially in winter, to be warming and supporting enough to take the

place of port and sherry; and hence some persons favourably disposed towards the lighter wines yet believe themselves to be constrained to adhere to their sherry or port, or both.

If, therefore, wines could be obtained of a medium body and strength as compared with port and sherry, they would doubtless meet the case, especially in winter, of a large body of consumers. Now in the Australian wines we have exactly the wines in question.

Of these wines we are acquainted with many favourable critiques and notices; but, desiring to form an independent judgment, and having frequently been asked to express publicly our opinion of these wines, we have procured samples of all the kinds and varieties attainable, and have subjected them to a full and careful examination and analysis, with the results we shall now proceed to describe. That the soil and climate of Australia are highly favourable to the growth of the vine is unquestionable: the climate is sunny and dry; the soil ferruginous, iron being an essential constituent in a vine-bearing soil. In the year 1870 nearly two million gallons of wine were made in Australia, part of which was imported into this country.

The first three samples examined were purchased of Messrs. Leigh, Apps, and Smith, 150, Fenchurch-street.

Sample 1.

AULDANA RUBY, 15*s.* per dozen. — Of a deep tawny-red colour; mildly astringent, acidulous, and with a claret-like odour and taste, but with the after-taste of port; stimulating and sustaining. A sound, full-bodied wine, of good flavour and quality.

	1000 grains.
Specific gravity (60° F.)	993·3
Residue	26·57
Residue after ignition	2·45
Alkalinity of residue (K H O)	1·79
Bitartrate of potash	·62
Phosphoric acid (P_2O_5)	·48
Total acid, as tartaric ($C_4H_6O_6$) ...	8·14
Volatile acid, as acetic ($C_2H_4O_2$) ...	1·86
Absolute alcohol	125·72
Proof spirit—27·26 per cent.	
Grape sugar	None

Sample 2.

AULDANA RUBY, 30*s.* per dozen.—Deep-coloured, fruity, of good aroma, and with a delicate and somewhat port-wine flavour, full-bodied, warm and sustaining, and altogether a very superior wine.

Specific gravity	999·4
Residue	33·25
Residue after ignition	24·2
Alkalinity of residue	1·40
Bitartrate of potash	1·43
Phosphoric acid	·39
Total acid, as tartaric	9·37
Volatile acid, as acetic	2·04
Absolute alcohol by weight	134·4
Proof spirit—29·04 per cent.	
Grape sugar	2·95

Sample 3.

AULDANA WHITE, price 36*s.* per dozen.—Of a pale-sherry colour, subacid, vinous, refreshing, warm and stimulating, and of very agreeable flavour; an excellent wine, resembling a hock.

Specific gravity	991·3
Residue	22·65
Residue after ignition	2·26
Alkalinity of residue	·619
Bitartrate of potash	·93
Phosphoric acid	·34
Total acid, as tartaric	8·30
Volatile acid, as acetic	1·84
Absolute alcohol by weight	144·00
Proof spirit—31·108 per cent.	
Grape sugar	·54

The following four wines were purchased of the Tintara Vineyard Association, Adelaide-street, and 50, Old Broad-street, London, E.C.:—

Sample 4.

TINTARA RED, price 18*s.* per dozen. — Of a very pale port-wine colour, subacid, somewhat astringent, and with a flavour slightly resembling that of port, warm, satisfying, and of considerable alcoholic strength, but of no delicacy either of aroma or flavour. 1000 parts, on analysis, furnished the following results:—

Specific gravity	990·1
Residue	21·9
Residue after ignition	2·50
Alkalinity of residue	1·90
Bitartrate of potash	·404
Phosphoric acid	·480
Total acid, as tartaric	6·36
Volatile acid, as acetic	·904
Absolute alcohol by weight	120·0
Proof spirit—26·00 per cent.	
Grape sugar	None

Sample 5.

TINTARA RED, price 30*s.* per dozen. Vintage 1867.—Of a rather pale port-wine colour, but little acid, dry, sub-astringent, strong and sustaining.

Specific gravity	987·4
Residue	20·1
Residue after ignition	2·61
Alkalinity of residue	1·96
Bitartrate of potash	·344
Phosphoric acid	·32
Total acid, as tartaric	4·87
Volatile acid, as acetic	·69
Absolute alcohol	144·4
Proof spirit—31·108 per cent.	
Grape sugar	None

Sample 6.

TINTARA RED, 36*s.* per dozen. Pewsay Vale. — Deep-coloured, full bodied, slightly bitter, and with a port-like flavour, but without any peculiar delicacy either of aroma or flavour. A sound and satisfying wine.

Specific gravity	991·6
Residue	24·14
Residue after ignition	2·80
Alkalinity of residue	1·94
Bitartrate of potash	·68
Phosphoric acid	·25
Total acid, as tartaric	7·12
Volatile acid, as acetic	1·02
Absolute alcohol by weight	108·0
Proof spirit—23·44 per cent.	
Grape sugar	1·00

Sample 7.

TINTARA WHITE. 1864. Pewsay Vale. Price 34*s.* per dozen.—Odour agreeable, taste subacid, nutty, and somewhat astringent, but very pleasant; clean, strong, and stimulating. A very excellent white wine.

Specific gravity	990·5
Residue	17·9
Residue after ignition	1·50
Alkalinity of residue, as KHO ...	·996
Bitartrate of potash	·809
Phosphoric acid	·38
Total acid, as tartaric	7·50
Volatile acid, as acetic	1·07
Absolute alcohol by weight	108·0
Proof spirit—23·44 per cent.	
Grape sugar	·30

Sample 8.

AULDANA RUBY, 30*s.* per dozen. Purchased of Patrick Auld and Co., proprietors, Auldana Vineyards, Adelaide. Depôt, 8, Mill-street, Hanover-square, London.—Of a ruby-red colour, odour agreeable, claret-like, taste resembling claret, with an after-taste reminding one of port; subacid, astringent, but free from roughness and bitterness; full bodied and flavoured, and of considerable

strength in alcohol; although of the claret type, yet widely different, and altogether a very superior wine.

Specific gravity	992·6
Residue	14·26
Residue after ignition	2·41
Alkalinity of residue	1·82
Bitartrate of potash	·008
Phosphoric acid	·18
Total acid, as tartaric	6·75
Volatile acid, as acetic...	1·92
Absolute alcohol...	95·0
Proof spirit—20·63 per cent.	
Grape sugar	·60

We much regret that we have been unable to procure in time for this report a sample of the White Auldana sold by Messrs. Patrick Auld and Co. at 30s. per dozen; also that the Red and White Buckulla is not at present procurable in this country—wines made by Mr. Wyndham, of Sydney, New South Wales, and which are stated to be amongst the finest wines ever imported into this country from Australia.

The preceding results will be more readily comprehended as arranged in the following table:—

COMPOSITION OF WINES PER 1000 GRAINS.

No.	NAME OF WINE.	Specific gravity.	Residue.	Residue on ignition.	Alkalinity of residue = to KHO.	Bitartrate of potash.	Phosphoric acid.	Total acid (tartaric).	Volatile acid (acetic).	Alcohol by weight.	Proof spirit per cent.	Sugar.
1.	Auldana Ruby, 15s.	993·3	26·57	2·45	1·79	·62	0·48	8·14	1·86	125·72	27·26	—
2.	Auldana Ruby, 30s.	999·4	33·25	24·2	1·40	1·43	·39	9·37	2·04	134·4	29·04	2·95
3.	Auldana White, 36s.	991·3	22·65	2·26	·619	·93	·34	8·30	1·84	144·00	31·108	·54
4.	Tintara Red, 18s. ...	990·1	21·9	2·50	1·90	·404	·480	6·36	·904	120·0	26·00	—
5.	Tintara Red, 1867, 30s.	987·4	20·1	2·61	1·96	·344	·32	4·87	·69	144·4	31·108	—
6.	Tintara Red, 36s. ...	991·6	24·14	2·80	1·94	·68	·25	7·12	1·02	108·0	23·44	1·00
7.	Tintara White, 1864, 34s.	990·5	17·9	1·50	·996	·809	·38	7·50	1·07	108·0	23·44	·30
8.	Auldana Ruby, 30s.	992·6	14·26	2·41	1·82	·008	·18	6·75	1·92	95·0	20·63	·60

The above results, general and analytical, show that the Australian wines submitted by us to examination are remarkable for their robustness or body, and alcoholic strength, being in these respects superior to most of the wines of France, Germany, Greece, and Hungary, and second only to the wines, sherries and ports, of Spain and Portugal. They, therefore, occupy an intermediate position between the light wines on the one hand, and the artificially fortified or brandied wines on the other, and are well calculated to take the place of those other in our somewhat cold and damp climate. The red Australian wines possess in some degree the characters and flavour of both claret and port, while the white wines assimilate to hock. As shown by the analyses, the constituents of grape-juice abound in them; the phosphoric acid is particularly high, while all the wines but one were remarkably free from sugar.

Taking the wines in order of the several parties of whom the samples were procured, we would remark of the three wines purchased of Messrs. Leigh, Apps, and Smith, that the Auldana Ruby, at 15s. per dozen, is a full-bodied and sound wine, of fair flavour and quality, and very cheap at the price; that the Auldana Ruby, at 30s. the dozen, is in all respects a very excellent wine, fruity, but delicate, warm, and sustaining; lastly, that the Auldana White, at 36s. per dozen, was a very superior wine, resembling a hock, but stronger and more stimulating.

Of the four wines purchased of the Tintara Vineyard Association, we would express ourselves as follows:—Of the Tintara Red, at 18s. per dozen, we would only remark that it was a strong and genuine wine; the Tintara Red, at 30s. per dozen (vintage 1867), was a strong, dry, non-acid, satisfying wine, which might in those respects well take the place of port wine; the Tintara Red, at 36s. per dozen, was a sound and satisfying wine, with a port-like taste and character; that the White Tintara (vintage 1869), at 34s. per dozen, is of a very agreeable bouquet and flavour, clean, dry, nutty, and somewhat astringent, and in all respects a wine of the first quality.

Finally, that the Auldana Ruby at 30s. per dozen, procured of Patrick Auld and Co., was an agreeable wine, with a claret-like odour, and a taste resembling claret, but an after-taste of port, full-bodied and sustaining, and altogether a very superior wine.

We will bring this short article to a conclusion with a few remarks on the practice of taking wine diluted with water. This custom is almost universal on the Continent, and as rare in this country as it is general there. That the practice is a desirable one as respects the digestion of food, and therefore as it affects health, is unquestionable. It seems to us that the ingestion into the stomach, and its admixture with the food, of wines containing from between 30 to 40 per cent. of proof spirit must tend to harden the food, to retard digestion, and in the long run probably to injure the delicate and highly organised coats of the stomach. But there is another great advantage attending the dilution of wine with water, since it furnishes a valuable test of the quality of the wines so treated. A bad wine will not bear this test, for it brings out all its bad qualities; but with a really good wine the reverse is the case, and the good qualities are thus rendered more sensible to the palate, the sensitiveness of which is impaired for the time by contact with liquids of considerable alcoholic potency.

ON EXCISION OF THE INFERIOR MAXILLA.

(A Letter addressed to SIR WILLIAM FERGUSSON.)

BY J. LIZARS LIZARS, ESQ.
(OF TORONTO.)

THE following interesting letter, addressed to Sir William Fergusson by Mr. Lizars, of Toronto (a nephew of the late Professor Lizars), has been forwarded to us by Sir William for publication.

Toronto, Ontario, Canada, 30th August, 1872.

MY DEAR SIR WILLIAM,—The late Professor Goodsir having directed my attention in 1848 to a footnote in an edition of "Knox's Anatomy," in which the operation for the removal of the superior maxilla (shortly before proposed by my late Uncle John) is looked upon as an impossibility or Quixotic, my attention was thus early and forcibly drawn to the surgery of the jaws. I have, therefore, in studying the operations on the lower jaw, been struck with the unanimous testimony of authors as to the "facial paralysis," greater or lesser, and the frequency of annoying and often long-continued salivary fistulæ, to obviate which must necessarily be an object of anxiety to the surgeon, and of the utmost importance to the patient.

Finding that the ordinary yet standard text-books on surgery ("Holmes's System of Surgery," vol. iv., page 136) all advise an incision more or less semilunar—viz., along the posterior and inferior margin of the half of the jaw to be removed, whereby the portio dura and parotid duct must necessarily be divided, and paralysis and probably salivary

fistula produced.—I came to the conclusion that if the knife could be passed *below and nearly parallel* to the duct, it would pass *between* the branches of the "pes anserinus," going to the upper and lower lips respectively, dividing merely the small anastomosing branches or twigs, and at the same time divide the facial artery at a point where it would be reduced in size by the branches given off from it to the skin and lower lip, and that thus bleeding would be less formidable, and paralysis and salivary fistula completely prevented.

With this object in view I applied to Professor Norman Bethune, of Trinity College, who kindly furnished me with a cadaver on which to experiment; and having made one *straight* cut from the angle of the mouth towards the upper part of the lobe of the ear as far as the posterior magin of the ascending ramus of the maxilla, I denuded the jaw of its periosteum, the masseter, and that part of the temporal muscle attached to the external and lower part of the coronoid process (using the handle of the scalpel principally), extracted the lateral incisor, and divided the jaw with the bone-pliers (the subject being young); then seizing the jaw at its cut end, drew it outwards and upwards, thus facilitating the removal of the mucous membrane and muscles from its inner surface; dividing the inferior dental artery and nerve and internal lateral ligament with the knife, and by keeping close to the bone, avoided the internal maxillary artery. The coronoid process and neck of the jaw, now being free, were divided with the pliers, and nearly the half of the jaw easily removed.

Having thus demonstrated the feasibility of this method of operating, I decided to put it in practice on a patient then under my care, a narrative of whose case I subjoin.

John N——, aged thirty-seven, a native of Glasgow, Scotland, with sandy hair and whiskers, blue eyes, and florid complexion, and well nourished. Had suffered in youth from strumous abscesses of the glandulæ concatinutæ, the cicatrices being still visible. After this he enjoyed excellent health until recently. Never had syphilis, nor was mercurialised as far as he knew, though from his breath, and the state of his teeth and gums, I believe he had. He first consulted me last summer on account of an enlargement of the left side of the inferior maxilla. The tumour was smooth and even externally, and extended from about an inch below the zygoma to a line perpendicular to the angle of the mouth, and was slightly nodulated along the lower margin of the horizontal ramus, as also along its inner surface, where, by its projection inwards, it pushed the tongue slightly to the right side, and interfered with speech. The skin over the parts supplied by the mental branch of the inferior dental was devoid of sensation, and the tumour was painless on manipulation and at all other times.

Unwilling to submit the patient to so severe an operation as excision without an attempt to reduce it by medication, I resorted for a few months to the use of iodides, bromides, and counter-irritants; but the tumour continuing to increase, I was at length forced to operate. Consequently, on the 19th of February, 1872, assisted by Professor Bethune and two other medical men, the patient being fully under the influence of chloroform, I operated in the manner above described, using the handle (bone) of the scalpel and my fingers as much as possible. The proximal end of the facial and inferior dental were the only vessels requiring ligature, the others being occluded by torsion. The wound, having been swabbed out with a solution of carbolic acid, and exposed to the air till all oozing ceased, was accurately adjusted, and kept together by silver-wire sutures, pad, and bandage. The patient then rose from the table, got into bed, and immediately asked for food with a pretty clear voice. *At this time and ever since he has had full control of all the muscles supplied by the portio dura.* On the third day after the operation he left his bed. In ten days the wound was healed, with the exception of a small opening at its posterior extremity, through which saliva dribbled away for a few days, but was arrested by the application of nitric acid, after which it rapidly closed. The flow of saliva, I am certain, must have been due either to the existence of the socia parotidis or the division of some of the racinus of the main gland. The only other annoyance I had to contend with was a slight attack of erythema of the left side of the neck, and the formation of a couple of small abscesses at the seat of the old cicatrices above mentioned. The tincture of the muriate of iron externally, the lancet, and poultices, with tonics and generous diet, soon rid me of these, and the patient returned to his office in one month from the date of operation.

In describing this operation I have adhered strictly to what was done. I may now add that in cases where the bone is too dense to be divided by pliers, the chain keys or the metacarpal saw can be easily used to divide it in whole or in part; and that should the tumour prove too large to be removed by the single incision, the surgeon has the option of making fresh incisions from any point of the first, either upwards or downwards, as the exigencies of the case may demand. One from the angle of the mouth downwards would, I believe, be the best, as it would divide the smallest number of branches of the facial.

When the patient is a man I can see no objection to this mode of operation. (I have shown N——'s face to medical men and others, but so fully do his whiskers cover the scar, that most have failed to discover the nature of the case.) In the case of women, some may urge that the old line of incision would be less apparent. In reply, let me ask which is preferable, a simple scar across the face but full power of *all* the muscles of expression, or a scar which must show more or less a staring eye, a mouth whose expression is gone, and the saliva probably dribbling from one corner of it? I firmly believe every woman of ordinary sense would prefer the former.

Since operating, I have been able to consult Heath and Guérin, and find that Beaumont and Huguier both operated by a *curved* incision from the angle of the mouth towards the ear, Huguier ending his at the mastoid process. The direction of the curve is not given, neither is the amount of paralysis mentioned, and all that is claimed is that *the eyelids* were unaffected.

If not forestalled by someone whose cases I have not read of, I trust the above may be of interest to you and the profession, and that I may yet hear of good results following its employment.

I have the honour to be, my dear Sir William,
Yours respectfully,
J. LIZARS LIZARS.

P.S.—I have three cases of excision of the elbow and one of the shoulder-joint at present on hand, all doing well.—J. L. L.

THE CATTLE PLAGUE.

FROM the results of recent investigations the conclusion may be fairly deduced that cattle plague existed in the East Riding of Yorkshire in the early part of August, although it remained undetected until the first week in September. During this time infected animals were exposed for sale in two markets at Hull, and in one at Hunmanby, and had it not been the case that nearly all the stock on these three occasions were fat, and in the ordinary course of things consigned to the butcher, the rinderpest would ere this have become widely spread in the north of England.

The following facts, which have been elicited at different times and places, are arranged in the order of their occurrence. They indicate the probable mode of the introduction of the disease, and distinctly point out how it may be introduced at the same part of the country under similar conditions, until a radical change be made in the existing arrangements in that part of the port which is defined for the landing and slaughter of cattle from suspected countries, among them Russia, where rinderpest in normally prevalent in the eastern provinces.

In three districts of the East Riding outbreaks of cattle plague occurred, as nearly as we can ascertain, in the beginning, middle, and end of August. At Patrington, about fifteen miles from Hull, the first animal was attacked, according to the evidence before us, about the end of the first week in August. At Bridlington, we have good reason to believe, cattle plague appeared about the middle of the month; and at Pocklington, where it was first detected, it was certainly present among Mr. Berriman's herd in the last week of August.

The origin of the disease in these places has been a

subject of anxious inquiry; and the evidence in each case distinctly points to the port of Hull as the centre whence the *contagium* was distributed. It is now a matter of history that a considerable number of diseased cattle, which had been shipped at Cronstadt, reached Hull on board the *Joseph Soames* on July 26th. The animals were inspected on board, and about one-third of a cargo of fifty-six cattle were found to be affected with plague. The animals were not permitted to land; but as it was absolutely necessary to dispose of them they were killed on board the ship, transferred to lighters, battened down, and towed out to sea, to be sunk on July 29th. No sufficient means for sinking the lighters appear to have been employed, and ultimately nearly all the carcasses were washed ashore on the Lincolnshire coast, and were buried by the officers of the Customs. Before any carcasses were stranded the virus of cattle plague was surely producing its effects in the system of at least one animal, which was purchased in Hull cattle-market on July 29. How the disease was conveyed to this beast will probably never be known; but the facts are in themselves sufficiently suggestive. For three days before the sale a score of cattle affected with plague stood on the deck of a vessel lying in the Humber Dock, not far from the market. Butchers and other persons employed about the cattle passed from the deck to the quay, and thence away anywhere, without hindrance, as a matter of course. A certain heifer left a farm in the neighbourhood of Hull on Monday morning, July 29th, in good health, stood in Hull market for some hours, was bought by a butcher at Patrington, conveyed to that district along with a steer purchased in the same market, and in ten days from that time was attacked with a disease which necessitated its immediate slaughter. In another week the steer was also attacked by the same malady, and killed; and in a few days three calves and two cows, in an adjoining field, were successively affected with the disease, and died. These animals were seen by the inspector of the district, and by other veterinary surgeons, and their testimony was emphatically in favour of the presence of rinderpest; besides which, the affection has since spread to cattle in a neighbouring pasture.

Next in order an outbreak of cattle plague occurred at Bridlington; in this, as in the former instance, the disease followed the introduction of cattle purchased at Hull market on July 29th, or on the two subsequent market days. The evidence is not very precise on this point, but it is certain that the farmer on whose premises the disease first appeared at Bridlington bought animals at Hull on July 29th, August 5th, and August 19th. It is equally certain that from his premises the affection was communicated to cattle in the neighbourhood. Cattle sent from his farm to Hunmanby market were purchased by Mr. Berriman, of Pocklington, and soon after their arrival cattle plague broke out, and finally caused the destruction of his herd. From this centre the disease extended to cattle in the adjoining pasture, and during the last few days over sixty healthy cattle have been slaughtered by order of the local authorities for the purpose of preventing the further spread of the affection.

No specialities have presented themselves to our notice during our inquiries in respect of the pathological characters and rate of progress of the disease in Yorkshire. In the open air, among animals in perfect health and under favourable sanitary conditions, cattle plague advances slowly, but with deadly certainty nevertheless. In the early stage the features of the disease are not repulsive, but when allowed to run on unchecked in a herd it soon asserts its claim to the title of malignant disease. The same unaccountable disposition to conceal the existence of the disease, and the opposition to the stamping out process which caused so much mischief in the former outbreak, have again to be encountered, and it is to be feared that a fortnight of valuable time was lost after the discovery of the nature of the malady before really effective measures were sternly insisted on in face of the opposition which was to be expected. There is no doubt, however, that the local authorities in the infected districts have shown a determination to act with promptness and energy, and they have succeeded in preventing the spread of the plague beyond the limits of the infected places.

Passing from our own country to the Continent we have to add that cattle plague has reappeared at Hamburg, after so long an interval that hopes of its entire extirpation were confidently entertained. Even with the aid of a military cordon and the stringent measures which are always employed in Germany, it is not easy to arrest the progress of this most fatal of the contagious diseases to which cattle are obnoxious.

Meanwhile, in this country, there are two opposed interests to be reconciled. The great manufacturing class clammer against the Government on account of the existing restrictions on the importation of cattle and sheep from the Continent, designating the laws which have been established, on sanitary grounds, as unjust, unnecessary, and prohibitive, and demanding free imports of animals so that the people may get food at a reasonable price. The agriculturist, on the other hand, insists that imported animals furnish an insignificant proportion of the total meat supply, and requires that the safety of home-bred flocks and herds shall be insured by the slaughter, at each landing-place, of all fat stock from abroad, and the quarantine of animals intended for stores. In the presence of conflicting testimony, one thing at least is certain—the whole question of importation of foreign stock is reopened by the unexpected outbreak of cattle plague in this country.

PROF. CORFIELD'S REPORT ON ISLINGTON.

IT will be in the memory of our readers that when Dr. Ballard resigned the appointment of Medical Officer of Health for Islington, he was succeeded by Dr. Corfield, Professor of Hygiene and Public Health at University College. His first report—viz., on the health of Islington for the year 1871—has just been published. Though it does not show any striking out of new lines of sanitary work, it is of some interest to sanitarians. One point on which Dr. Corfield dwells at some length is the question of the removal of dust and house refuse. It would seem that there is a great change in the value of dust, so that whereas the vestry in 1866–67 received the sum of £2200 from the contractors for dust, in 1871–72 they had to pay £4057 to the contractors for its removal, making a difference to the vestry of £6257. As a further disadvantageous consequence, the removal of dust is less perfect. The article being of no value, and the contractors having an interest in paying as few hands as possible for its removal, the tendency is to neglect the duties for the performance of which they contracted. Accordingly it was found necessary to appoint a temporary inspector of dust, whose whole time was given to the work, and Dr. Corfield recommends that the appointment should be made permanent. The contractors have been fined £202 for non-compliance with contracts.

As to diseases, small-pox was the principal epidemic, and its progress is shown in the following return of the number of cases in public institutions:—In January there were 121 cases, in February 123, in March 148, in April 249, in May 236, in June 178, in July 98, in August 75, in September 64, in October 20, in November 27, and in December 40. Small-pox caused 386 deaths, measles 148, whooping-cough 154, and scarlet fever 139. The greatest number of deaths from small-pox occurred in June; from whooping-cough and measles in December. The temperature of the first fortnight in December was 12° Fahrenheit lower than the average, and the deaths from diseases of the respiratory organs were 690 (460 being the greatest number ever recorded before.)

Professor Corfield gives a table of cases of sickness in public institutions which would be very interesting if it were not very incomplete. The cases in the workhouse are not given, and it has nearly 800 inmates. The cases of sickness in out-door paupers are only given for half the year. We believe that Professor Corfield and his able colleague, Mr. Collingwood, are willing to take great trouble to utilise and tabulate the experience of the Poor-law medical officers. We submit that every facility should be given to make returns of sickness in public institutions perfect, in the interest at once of the inmates and of the public. It is interesting to notice that the death-rate of Islington was only 228·7 per 10,000, while that for London generally was 247. Every large town in the kingdom, except Portsmouth, had a higher death-rate than Islington.

THE LANCET.

LONDON: SATURDAY, SEPTEMBER 28, 1872.

EVERY year, with the last week of September, London makes a temporary addition to her family. From all parts of the three divisions of the kingdom the "brave young British soul," as Mr. CARLYLE calls him, is represented in the metropolis. His arrival has been anxiously awaited by the Mrs. CAMMYSOLES of "Our Street," by the struggling professional man who has still room for a limited number of boarders, or by those numerous philanthropists who can offer him all the comforts of a home. Lodged or housed, as the case may be, he enrols as a student at one or other of the medical schools, which are as excellent as they are abundant. He is about to find or force a way for himself to professional distinction. The "first turf" is going to be cut, the rails to be laid, the stations to be set down, and the terminus to be defined. He hastens to the opening ceremony, and, as one of an audience composed of many youths like minded and circumstanced with himself, he awaits the words of welcome, encouragement, and good counsel from the lips of some "lecturer" chosen *ad hoc*.

The late Cardinal WISEMAN once wrote an essay, which he subsequently delivered, on the best mode of framing an introductory address. There are few subjects on which advice is more required. Dip into any volume of THE LANCET for the previous generation, and peruse the harangues at the opening of the medical schools. With few exceptions they are commonplace in conception, monotonous in tenor, and conventional in language. A number of men, not accustomed to the treatment of social ethics, have found themselves told off to address an audience of young men on the broad questions of conduct, culture, and professional aspiration; and what is the result? In nine cases out of ten the barest platitudes are served out to young brains hungering for fresh and sustaining food; a sort of lay sermon is delivered by a preacher whose first trial it is; and the dreary performance comes to a close with a quotation as inevitably prelusive to that joyful event as the song of the cuckoo to the approach of spring. "Lives of great men all remind us," or, "Let us then be up and doing," disperses the audience as regularly as the hour-stroke of the clock.

So constant has the usage become that the 1st of October might almost be put down in the almanac as the day when introductory addresses set in. Yet surely there are better modes of fulfilling the inevitable duty than the traditional one. Less of commonplace literature or rhetoric run-to-seed and more of practical advice would be a welcome innovation for the better. We have often heard medical men remark that a model introductory lecture was that addressed every year to his students by the late Professor SYME. That consummate teacher plunged at once *in medias res*; told his audience what was essential in their studies and what was, comparatively speaking, superfluous; recommended the particular text-book which would repay perusal; condescended even to direct them as to the employment of their leisure—how it could be made to subserve their work while continuing to amuse; and wound up with some shrewd man-of-the-world hints for which every young man coming up to town has more or less reason to be grateful. And all this, without the didactic strain of the "heavy father," as stage critics style him; but with a homely brevity and *bonhomie* worthy of the Iron Duke himself.

Useful in Edinburgh, the hints we have referred to as often winding up Professor SYME'S introductories are still more so in London. So many are the diversions, distractions, and modes of dissipation in the metropolis that it speaks volumes for the London University that it has hitherto resisted so well such an amount of non-academic, or rather anti-academic influence. A university, says the Master of Lincoln, should be like the poet's garden—"not wholly in the busy world, nor quite beyond it"; and he justly congratulates Oxford and Cambridge on their fulfilment of these conditions. In medical study, however, hospital training is such an important element that the student cannot qualify himself unless where hospitals are possible—that is, in large life-centres. All the more, however, is it incumbent on the guides of our budding practitioners to secure them the means of prosecuting their studies with as little temptation as possible from the great seething tide of the busy world around them. Lodging-house life, though much improved from what it used to be in Mr. BOB SAWYER'S or Mr. SAM HUXTER'S time, is the least advantageous for the student. Residence under a professional man's roof presents, of course, the best conditions for the profitable and pleasant employment of his time; but, where that is not easily attainable, there is no institution like the college hall. In London this is a comparatively recent experiment; but in Scotland—notably at St. Andrews—it has been for some time in working, and with the most satisfactory results. Apart from the constant though unfelt supervision exercised over its young inmates, the college hall has features of its own which are peculiarly fitted to promote the pleasant prosecution of study. To say nothing of the honourable rivalry bred by constant association with each other, student assists student, not only by comparing notes or interchanging opinions, but by the steady, gentle pressure of example. Under conditions of vigilant and kindly superintendence, a "Burschenschaft" is developed, retaining all the genial and even jolly features, with none of the rowdyism, of the fraternities at Bonn or Heidelberg; and the plastic and impressionable years of student-life are spent under auspices the most favourable for the growth of a manly tone, and for the formation of a social and professional standard of conduct. Such advantages the college hall supplies, and we hope to see the day when no metropolitan school shall be without one.

Meanwhile a large contingent of the generous youth of the country is newly arrived in the midst of us, and is forming its first impressions of the great world of London. Our heartiest wishes are with them and theirs. May their course be prosperous and pleasant along the lines of professional study marked out for them. Let them be true to the life they have chosen, and rest assured that no reasonable ambition will be unsatisfied. Examples are plentiful

of honest industry and high-minded aspiration reaching its reward. The Father of Medicine himself has defined the duties, interpreted the spirit, and prescribed the future of the practitioner in language so ennobling that we can conceive no better "introductory" for the student in his novitiate than the perusal and the moral assimilation of the "Oath of HIPPOCRATES."

A FURTHER addition has recently been made by Dr. PARKES, of Netley, to the remarkable train of researches by which he has laboured to fix the true relations of food to nutrition and work. In these researches, commenced in December, 1866, Dr. PARKES has had advantages which very few enjoy, and has used them with a skill and judgment which still fewer possess. He has been able to make his experiments upon soldiers accustomed to a monotonous life and rigid discipline, and in absolutely perfect health. He has been able to measure and analyse the ingesta and egesta with an accuracy never before attained in prolonged trials, and to fix the conditions of rest and exercise with perfect precision. The results he has obtained are equally valuable to physiology and pathology, and some of them tend to revolutionise our ideas on several important points.

To render Dr. PARKES's latest discoveries intelligible to our readers, it is necessary to give a sketch of the two lines of investigation which he has been pursuing, and which unite into one in the memoir which he presented to the Royal Society on the 25th of April last.

In the first of these he dealt with the question of the relation of work to muscular disintegration, which received such forcible illustration in the celebrated experiment made by FICK and WISLICENUS in their ascent of the Faulhorn in 1865. In two series of experiments, made under different conditions, he confirmed the main conclusion arrived at by the Swiss professors—namely, that severe muscular work is not attended with any notable increase of muscular oxidation; or, in other words, that the work is not done at the expense of the muscles. But a wider generalisation than this appeared to arise from the experiments, and Dr. PARKES arrived at the conclusion that the metamorphosis of tissue was absolutely *diminished* during muscular work and increased during rest. It is clear that this view illustrates the common experience that the muscles grow by exercise and dwindle in inaction, and that increased nitrogenous food is required for hard work—the addition being wanted, according to Dr. PARKES, for the increased nutrition of the muscles. This unexpected conclusion was assailed by VOIT, of Munich, who maintained that no alteration in the excretion of nitrogen took place either during or after work, and ascribed the results obtained by Dr. PARKES to inaccurate measurement of the ingested nitrogen. Dr. PARKES replied in 1871 by some experiments, of which one may be quoted as to all appearance conclusive as against VOIT:—

A man was kept for some days on half the normal supply of nitrogen, and then for five days lived on food containing *no nitrogen* whatever. On the fourth day he did an extremely hard day's work with wonderful ease. Now on the first day of non-nitrogenous diet the excretion of nitrogen in the urine was 5·936 grammes. It sank day by day until it reached its lowest point (3·812 grammes) on the day of hard work. But on the fifth day, which was passed in rest, no less than 8·265 grammes of nitrogen passed in the urine.

Whether this experiment, which appears to dispose of VOIT's objection, is equally conclusive in favour of Dr. PARKES's theory, may, however, be doubted, and the doubt is by no means cleared up by the author's last-published paper.

The other research to which we have alluded was commenced in conjunction with the late Count WOLLOWICZ in 1870. It had for its object the determination of the effect of alcoholic drinks on the urinary and alvine evacuations, the temperature, pulse, &c. In the first series pure alcohol and brandy, and in the second claret of good quality, were used; and the results demonstrated several very important facts. The alcohol in each form was found to have substantially the same action on the system. No effect was produced on the excretions, for the nitrogen, phosphoric acid, chlorine, and free acid all remained unchanged, even when somewhat large doses were given. The temperature also both of the axilla and rectum was not affected; the body-weight and the process of primary digestion did not vary; and the only certain effect of the alcohol during the time of the experiments (three to ten days) was to raise the pulse very materially, the work of the heart being increased by as much as one-fifth.

It appears clear from these experiments that alcohol in a healthy subject, and in moderate doses, does not affect the metamorphosis of tissue, for even the nervous tissues, if their metamorphoses can be measured by the phosphoric acid excreted, underwent no material change; and it can hardly be doubted that the frequent stimulation of the heart's action produced by alcohol in such subjects as the men experimented upon by Dr. PARKES is solely injurious.

We now come to Dr. PARKES's last research, in which the effect of alcohol on work is investigated. This research is in some respects the best of the series. To nearly all the others the objection of VOIT was to some extent applicable—namely, that there was no absolute certainty as to the quantity of ingested nitrogen. But Dr. PARKES was fortunate enough this time to find a man—a Scotchman—who was able to live and work for sixteen days on oatmeal, milk, salt, and water, without suffering in health or strength, and even without losing more than two pounds in weight. Enough oatmeal for the whole experiment was first obtained, and was analysed after thorough mixing. The milk was analysed at the commencement of the experiment, and was every day diluted to a fixed specific gravity. The quantities were so regulated that the man received every day exactly 20 grammes of nitrogen. The experiment was arranged as follows:—For six days the man remained as nearly as possible at rest. Then for three days he worked as hard as possible. Then followed three days more of rest, and then another three days of hard work; but this time he took, at ten, two, and six o'clock in each day, a dose of 4 fluid ounces of brandy, the 12 fluid ounces taken each day containing 5·4 fluid ounces of absolute alcohol. Finally, for two days he rested. Throughout these five periods the food was constant, and the urinary and alvine evacuations were carefully collected, weighed, and analysed. Many other observations were made, but

we can only epitomise the results as regards the nitrogen. The average daily excretion, in grammes, of nitrogen during each period was found to be as follows:—

	In Urine.	In Fæces.	Total.
1. Rest...	15·183	3·765	18·948
2. Exercise on water...	16·274	4·981	21·255
3. Rest...	15·850	3·251	19·101
4. Exercise on brandy	15·750	4·372	20·122
5. Rest...	15·007	3·215	18·212

During the whole period the total nitrogen discharged each day was, on an average, 19·59 grammes, against 20 grammes ingested; so that there was a loss in sixteen days of about 7 grammes (108 grains).

It will be seen that these figures do not confirm, although they may possibly prove to be not inconsistent with, the theory which Dr. PARKES drew from his earlier experiments. Even taking the ureal nitrogen alone, the excretion is seen to increase instead of diminish during the first, and to remain stationary during the second, of the periods of work, and to fall off in each of the subsequent periods of rest. The figures show, however, that VOIT was mistaken in supposing that no alteration took place in the excretion of nitrogen under either condition. In other respects the research has confirmed the author's previous conclusions, and even anticipations. The brandy did not affect either of the excretions. It increased the heart's action, and that was all. The man not only found that the brandy did not help him in his work, but that it hindered him materially. The first dose did neither good nor harm; but the second made him hot and thirsty, produced palpitation of the heart, and on the third day he found himself "obliged to stop from time to time, because, to use his own words, 'of his breathing not being so good.'"

We must pass by the many other interesting results of these experiments; but we cannot avoid an allusion to Dr. PARKES's concluding remark. He points out that in the face of these experiments it is hard to believe in the current theory of the depressing effect of alcohol on the pulmonary excretion of carbon. Considering that the work of the heart is increased by alcohol, and the metamorphosis of tissue is unaffected by it, it would rather appear probable that an increased oxidation of non-nitrogenous material, and therefore an increased excretion of carbonic acid, must take place to provide the force for the extra work. The published researches on this subject are indeed by no means satisfactory, and we cordially agree with Dr. PARKES in wishing for new experiments. Perhaps Dr. PARKES himself, whose experiments have suggested the doubt, may be induced to supply the want. In doing so he would add materially to the deep debt of gratitude which every physiologist owes to him.

THE projected Euphrates Valley Railway has been discussed from various points of view. It has been considered in its political, its commercial, its social, and even in its æsthetical aspects. It would traverse, as Mr. CLEMENT MARKHAM told the British Association for the Advancement of Science at the Brighton meeting, "the most ancient and interesting countries in the world"; and if, as Capt. FELIX JONES suggested, the railway should pass by way of Kerbela (Meshed Hussein) and Nedjef (Meshed Ali), it would open out to the ordinary tourist the two most interesting and least familiarly known of the cities venerated by Mahommedans of the Shiite sect. We can conceive with what pleased anticipations easy-going every-day tourists, jaded with the experiences of European travel, must have listened to the projects of Mr. CLEMENT MARKHAM and Captain FELIX JONES. Here was a prospect of new districts brimming with interest, and which knew not MURRAY, being placed within ready reach of them, and of their being able to feast their eyes upon the gorgeous mosque of Meshed Ali, hardly less sacred to the Shiite Mahommedan than the great mosque at Mecca. We can conceive also that, when the discussion at Brighton arising out of the re-awakened interest in the projected Euphrates Valley line became known in the East, something like horror must, in the Levant, have mingled with any notions which might be entertained there of the commercial and social advantages professed to be obtained by the railway. For there is a sanitary aspect of the question which would hold a foremost place in the Levantine mind, and which, if the railway ever passed beyond the stage of project, would probably first enlist the attention of the great European powers, but which appears altogether to have escaped the notice of the geographers at Brighton.

Meshed Hussein and Meshed Ali are probably the most important foster-places of cholera in Asia Minor. They are the burial-places of ALI, the founder of the Shiite sect, and of HUSSEIN, his second son, the two most venerated saints among the Shiite Mahommedans. To the shrines of ALI and HUSSEIN flock annually, in the month of Moharrem, not less than sixty thousand pilgrims from Persia and India, the former bringing with them many hundred corpses, in all stages of decomposition, for interment in the sacred soil of the holy cities. Again and again the congregation of pilgrims in the cities during the pilgrimage has been the occasion of grave outbreaks of cholera, the disease having been introduced there either by the Persian or the Indian pilgrims. Cholera has frequently accompanied the Persian pilgrims in their movement from Persia to Meshed Hussein and Meshed Ali, and been carried by them into the Ottoman dominions. Frequently also the disease, fostered by the unwholesome conditions which prevail in the two sacred cities during the pilgrimage, has attached itself to the pilgrims returning homewards or passing elsewhere, and been by them widely disseminated in the districts they have traversed. In the epidemic which has hardly yet ceased, Southern Europe narrowly escaped invasion from this source; for during the last year's pilgrimage to Meshed Hussein and Meshed Ali cholera was rife in the two cities, and the contingent of pilgrims who proceeded to the further pilgrimage at Mecca by the northern route across Arabia carried the disease with them, and introduced it successively into Hayell, in the Jebel Shammar, and Khaiber. From Khaiber the disease was communicated to Medina, and thence it passed to Mecca. Happily the prevalence of the disease at Mecca did not coincide with the period of the sacrifices, when the greatest accumulation of pilgrims takes place; and to this circumstance, together with the active hygienic measures adopted by the Ottoman

Government in the sacred city, the escape of Egypt and of Southern Europe from an extension of the disease similar to that which occurred in 1865 is mainly due.

The danger to the Ottoman Empire and Europe generally, in respect to cholera, from the pilgrimage to Meshed Hussein and Meshed Ali, was fully recognised by the International Sanitary Conference in 1866, and the measures of quarantine and of hygiene required to ward off or limit this danger were carefully discussed by the Conference. The Euphrates Valley Railway, by opening a swift and direct communication with the dangerous localities, would expose Europe perhaps to even greater peril from cholera than that arising from the extension of railway communication in Transcaucasia, to which attention has recently been directed, in reference to the existing epidemic in Europe, by MR. NETTEN RADCLIFFE.

The consideration here advanced ought not to be regarded as an objection to the establishment of the Euphrates Valley Railway, but it should receive attention from the great Powers of Europe, and particularly from the Ottoman and English Governments, if that project should ever be carried out. For the formation of the railway would permit, on the part of the Ottoman and Persian Governments, and would justify the great Powers of Europe in requiring from them, such a regulation of the pilgrimage to Meshed Ali and Meshed Hussein, and of the sanitary state of the two cities, as would prove a more effectual bar to the development of cholera there, and more protective against its dissemination, than the most carefully-devised system of quarantine.

"FOR mercy's sake, gentlemen, let us have a little less science and a little more art," is the exclamation of TROUSSEAU in his introductory lecture on clinical medicine. The suggestion is one that may very fitly be dropped into the ears of both teachers and students at the beginning of another winter session. It is more than ever necessary that the teaching of medicine and surgery should be practical and clinical. Students aforetime used to think of little but their examination, which, being a theoretical one, could be prepared for in a great measure by reading books. It is the great merit of any recent changes in the system of examination that they have become clinical and practical. In other words, before actually getting into responsible practice, the student is confronted with the cases and the difficulties which he will encounter as a practitioner, and upon his familiarity with which and with the treatment of which his future happiness and success will mainly depend. The examination is a kind anticipation of practice. To-day we urge upon the student the wisdom of anticipating both examination and practice by striving to see and to do all that he possibly can both in the dissecting room and in the wards of the hospital. In former times there was a class of dandy students who came with scented fingers to the dissecting room with an unsoiled copy of ELLIS or of the Dublin Dissector, and who, perhaps, deigned to look for five minutes at the well-prepared dissection of a real student. We remember to have heard of such a case in Edinburgh in which the scented anatomist had so far overcome his disgust as to be trying to peep into the abdomen without soiling more than the distal phalanges of his fingers. He was seen by GOODSIR, whose passion it was to see through and through any anatomical preparation. The illustrious anatomist came quietly behind the man of scent. With his great master hands he seized those of his unworthy pupil, and thrust them into the very depths of the abdomen. Let us hope that in this somewhat rough way he made the young gentleman understand what learning anatomy requires.

It is equally important that medical students should learn everything about actual cases of disease: how to recognise them; how to treat them; how to relieve them; how to divine, as it were, the peculiarities of patients; and last, not least, how to deal tenderly and sympathetically with anybody that is ill. The most irreverent nature should be awed into respect in the presence of a sick man, woman, or child. There is some difference of opinion as to when students should begin to attend hospital practice. We shall not stay to settle this further than to say that, even from the beginning of their medical studies, they should steal an hour whenever they can to see cases, or to see any special thing done for the relief of cases—always of course on the understanding that they do not neglect the immediate work in hand. All medical education is a failure that does not familiarise the student with actual cases of disease, and make him easy in the use of remedies and in the practice of common and frequently needed operations. There is still, in England, great need of more perfect arrangements for clinical teaching. Hitherto teaching has been far too stilted and formal and systematic; too much from a chair, too little at the bedside. Germany and France have been far ahead of us. So has Scotland, where SYME and BENNETT and GAIRDNER have loved to be teachers as well as practitioners. Probably DR. BENNETT'S mode of teaching by getting one student to examine a case and pronounce and advise upon it, then taking the opinions of the class, and finally criticising and controlling all, is the most successful that has been yet realised in this country. But it is too soon to crystallise into any one method. The great thing is for teachers as well as students to realise the responsibility of clinical work. Physicians that undertake teaching work should give time to it. They should be well paid for it; and then forego some degree of practice in order to teach. They should take students, as it were, into consultation, and aim at so impressing them with the cases in the wards that, years after, they will be able to appropriate these memorable words: "I am now an old man; yet I remember the patients whom I saw forty years ago, when on the threshold of my career. I recollect their principal symptoms, their anatomical lesions, and the numbers of their beds; and sometimes the names even of the patients come into my mind, after that long interval of time. These recollections are of service to me; they still afford me instruction; and you sometimes hear me appeal to them at our clinical meetings.

SAD accounts of the ravages of cholera reach us from various parts of India. The troops at Lahore are suffering very severely, and in Srinugger, Cashmere, nearly 400 cases were lately reported in one day, about 40 per cent. proving fatal.

Medical Annotations.

"Ne quid nimis."

ARMY MEDICAL SERVICE.

RUMOURS reach us from time to time that the discussions on the subject of the amalgamation of the British and Indian medical services are being renewed. It is surely time that some discussion took place in regard to the condition of the former service. The House has broken up, and members of Parliament have scattered themselves far and wide in search of health or amusement, the autumn manœuvres have terminated, Mr. Cardwell has entertained a host of distinguished foreigners, and departed leaving the War Office to the tender mercies of Captain Vivian. Meanwhile the much talked of new Warrant has, we suppose, been again pigeon-holed—to the great satisfaction, probably, of many a regimental medical officer. The prospects of the medical service have in no respect improved. The senior assistant-surgeons remain exactly where they were. It is the old story of hope being deferred, until medical officers have almost ceased to hope at all. It is simply ridiculous to suppose, however, that things can remain much longer as they are, unless the country be content to possess a body of officers in the junior ranks of the medical service who threaten to become unfit to take the field from the infirmities of age. The stagnation of promotion in the department bears, too, very hardly on those senior assistant-surgeons whose lot is cast in India, debarred as they are by the regulations from any employment other than the subordinate and monotonous duties of their rank, while they have the mortification of seeing other officers appointed to lucrative staff or civil duties. An eminent member of the Council—the Hon. James Fitzstephens—has stated that a man of ability and education should receive about three times the emolument in India that he would at home. How far this is from being true, in the case of senior assistant-surgeons, those know best who are serving in that country. The Royal Warrant of 1867, improving the pay of medical officers, remains up to the present time a dead letter in India. The increase of pay granted to senior assistant-surgeons is withheld in India, the pay being issued to them by the rules established in 1864, by which an assistant-surgeon of fifteen years' service is paid at the rate of 13*s.* a day only, with the Indian allowances of his rank—that of captain—instead of the higher rate. The Royal Warrant of December, 1871, relating to sub-lieutenant and lieutenant has already been promulgated in India, and rumour says that it is to carry back pay from the 1st January, 1872. Surely the same principles should apply to the Army Medical Department Warrant of 1867. By this date the time, one would think, had arrived for putting the provisions of that warrant in practice. Even round the Cape there is time for it to have reached India in 1872!

EMIGRANT SHIPS.

A VERY profuse and somewhat sensational communication has recently appeared in the columns of the *Daily News* from "An Amateur Emigrant." The production is a mild imitation of our old *Pall Mall Gazette* friend the "Amateur Casual"; and we are bound to believe that the imitator in this case was impelled to record his personal experiences for the benefit of future emigrants. Anyhow the "big gooseberry" has not been exhibited without effect. We have already as a result looked over a good half-score of letters on the subject, and there can be little doubt that at least treble that number will find their way into the columns or the waste-basket of our contemporary before the week is over, most of which will contain much that is true and not new, as well as much that is new and not true.

It is, however, our intention to view the matter in a properly serious aspect. Our readers may or may not be aware of the fact that 102,452 English, 19,232 Scotch, 71,067 Irish, 53,246 foreigners, and 6438 persons whose nationality was not classified, left the United Kingdom last year as emigrants. Of these 198,843 went to the United States, 32,671 to British North America, and 12,227 to the Australian colonies. Liverpool is, and always has been, the chief port of embarkation, no less than 166,166 of the above total number having embarked thence last year. It is a duty to discover how this quarter of a million of persons fare on their passage across the ocean, for the sanitary aspect of the question occupies a very prominent position. The state of health in which emigrants embark, the quarters assigned and the food supplied to them, and the treatment they receive on board, are all matters that bear as directly on the health of the community at large as drainage, disposal of sewage, and anything else that aids to effect prevention of disease and maintenance of health.

Not much more than twelve months ago we gave a synopsis of the thirty-first general report of the Emigration Commissioners, and we propose, in a short series of systematic reports, to show how far facts justify the statements made on that occasion; whether the cry that is being raised against emigration arrangements afloat is unreasonable, justifiable, or necessary; and, if necessary, whether means exist to modify or to remove the evils that are complained of so loudly and so emphatically.

As we write the *Atrato*, one of the largest vessels in our merchant navy, has been compelled to land 550 emigrants at Plymouth in order to repair machinery. Her living freight is destined for Melbourne; and as this is the first trip of a newly formed line of large emigrant ships, it is all-important that this subject should, specially in the interest of Australian voyagers, be most thoroughly sifted and investigated.

M. CHEVREUL.

AN account is given in *Nature* of a very interesting episode that took place at the last *séance* of the French Academy of Sciences, on the occasion of what may be regarded as the academic jubilee of the dean, the famous chemist M. Chevreul. The fiftieth year of his membership does not strictly occur till 1876, but it is well known that he would have been elected in 1816 had he not urged the Academy to give the vacant place to M. Proust, his compatriot and a celebrated chemist, who was old and infirm, and could not afford to wait. M. Faye, as President of the Academy, intimated that the members had resolved, as a token of their estimate of his works and their regard for his personal character, to present the venerable dean that day with a medal, without waiting for the arrival of the formal jubilee. The medal represents the features of the illustrious chemist, who bears the weight of his eighty-six years much more lightly than many of his fellows who are considerably younger than himself. M. Dumas, the permanent secretary of the Academy, and M. Elie de Beaumont, in eloquent speeches recounted the valuable services rendered by M. Chevreul, and their veneration and respect for his personal character. M. Chevreul attempted to respond, but had simply to express his inability to do so. M. Chevreul's first important work was published in 1806. He was collaborateur with Vanquelin, and has just completed a volume entitled "Mémoires de l'Académie," which throws light upon many of the most important scientific questions of the day. M. Chevreul has chosen for his motto

the beautiful maxim of Malebranche, which affords a true key to his life, his works, and his discourses: "*Chercher toujours l'infallibilité sans avoir la prétention de l'atteindre jamais.*"

"LUCRATIVE UNCLEANLINESS."

MR. W. N. HODGSON, M.P. for East Cumberland, is no doubt a useful member of the Legislature, but he must surely have been "napping" when the Public Health Bill was passing through the House last session, or he would hardly have expressed the opinion before his constituents which he is recently reported to have done, that "this legislation was going too far," and that it was "interfering unnecessarily with the management of land." It would appear that in Cumberland a "midden" and a "dunghill" are synonymous terms, and Mr. Hodgson told his audience that he was afraid the new Act would compel many of them "to remove that useful article (the midden) from their houses, and that at some expense," which, by some method of arithmetic beyond our conception, he estimated at "five or six millions." The testimony of the churchyard tombstones had satisfied him that the Cumberland farmers were, as a body, longer lived men than could be found elsewhere, and therefore his conclusion was that farm-yards should not be subject to State interference, for if a farmer found that himself or his family suffered from the proximity of a dunghill he would be sure to have it removed of his own accord. Clearly there is some confusion in Mr. Hodgson's mind as to the purpose and scope of the Act, which, whatever it may do with "middens," will hardly meddle with farm-yard dunghills, unless in very exceptional cases. The dunghill is no doubt inseparable from the farm-yard, and if it is not close under the house-windows, or does not drain into the well, nobody will trouble much about it; but the foul, open "midden," or "privy" as its name is in most parts of the country, is a dangerous nuisance with which we hope the Act will be found to deal vigorously. Take a stroll on a warm summer's evening round the homestead of a well-to-do farmer, and ten chances to one that you will find the smell of the privies predominating over the scents of the surrounding flowers. Not a roadside ditch in a village or hamlet but is turned into an open sewer, and what ought to be a valuable fertilising material runs to waste, and poisons both air and water. But Mr. Hodgson should not excite the bucolic mind by visions of expenditure which there is no real ground for anticipating. The adoption of the dry-earth system in villages, farmsteads, and isolated houses generally would not only render middens innocuous, but would lead to the saving of tons of manure which are now wasted.

MEDICAL STUDY AT CAMBRIDGE.

FEW medical curricula are more comprehensive than that of which the student may now avail himself on the Cam. Every subject is worthily represented in the lectures announced as about to be delivered in the Michaelmas term. The Regius Professor of Physic has issued instructions for the guidance of the student, according to which it appears that the chemical laboratory of the University will be open for use from the time when the alterations now in progress are completed. Every facility for the prosecution of anatomical, physiological, and clinical study is provided; while the excellent Museum of Materia Medica at Downing College is open daily to all medical students. To obtain certificates of attendance on the medical practice of the hospital, and also on the medical clinical lectures, pupils must have attended the physicians' practice three times each week during term time, inclusive of the clinical lecture on Friday, and must also have taken notes of such cases as may be assigned them by the physician. For the certificate of attendance on the surgical practice and on the lectures, a clinical surgery pupil must have attended the surgeons' practice three times each week, inclusive of the clinical lecture on Thursday. One feature in the Cambridge curriculum remains to be noticed, which we wish were equally well represented in other medical schools. "Opportunities for clinical instruction in mental diseases will be afforded at the County Asylum, Fulbourne, by Dr. Bacon, during the Michaelmas and Lent terms."

A PLEA FOR THE PEOPLE'S PARKS.

A PROJECT has lately been started which, whatever other people may think of it, at any rate merits the approval of all physicians and physiologists. A committee has been formed for the purpose of preserving the Alexandra Park as a place of healthful recreation for the millions who, from lack of time and money, are debarred from starting on those annual mountain-climbing tours to Scotland or Switzerland now so common, or from resorting for a few weeks to some pleasant sea-side place nearer home. Moralists and philanthropists have their pet schemes for elevating and improving the poorer classes, but the task is one of extreme difficulty, owing to the thoroughly artificial life led by the residents in every large city. Opportunities for intellectual pursuits and pleasures may be multiplied to any extent, but they fail to attract those who are impelled to seek for a total change of scene and action. Indeed, such opportunities, when embraced, do not necessarily tend to make men better, purer, or more civilised than they were before. Men and women, occupied during the day in factories and workshops, and deprived of the humanising influences of healthy homes and pure air, soon acquire a taste for feverish excitement and sensationalism. The worry, fatigue, and anxieties of an artificial life deprave the tastes and debase the morals. Physical health and energy are best preserved by out-door labour and out-door amusements, and there is nothing that conduces so much to the development of healthy tastes and morality as such exercises and the enjoyment of nature. A man who goes to his home fatigued after a game of cricket or football, or after a long walk in the country, is a healthy, manly, and generally a happy type of man. If this be the case with adults, how much more is it with the young of both sexes, whose natural instincts lead them to prefer "a day in the country" to any other enjoyment. The testimony of all, whether clergy or laity, who have an intimate knowledge of the habits of our working classes, and constant opportunities of observing their character, is, that if more rational and sensible amusements were provided, drunkenness and vicious habits of all descriptions would to a very large extent disappear from the ranks of those who are now demoralised by circumstances that are preventable.

A striking illustration is afforded by the experience of the Crystal Palace during the twenty years of its existence. During that time it was visited by over thirty millions of people, and yet only thirty charges against public morality have been made; and in the police-reports of last year Colonel Henderson states that upwards of two millions and ninety-three thousand people visited the Palace, and not a single case of drunkenness or disorder was recorded on the police-sheets.

It is only to do the poorer classes justice to say that, as far as lies in their power, they always seek wholesome recreation in the open air. Of this we may be assured, that change they will and must have; and if we do not afford them rational and healthy amusements within easy reach of London, they will resort to those which are unhealthy and

demoralising. The hours for labour are being shortened, wages are rising, and the political power of the labouring classes of this country has been vastly increased; and it is, therefore, of far greater importance than is generally supposed for the welfare of this country that these classes, especially the younger members of them, should grow up into healthy and contented men and women. Mere book-knowledge will not suffice to make them so, nor will the enjoyment or contemplation of nature; but a nation's strength and moral tone depend very much upon the character of its amusements. The product of the cricket-field, the country, and the park, is infinitely preferable to the outcome of the *cabarets* and *salons* of Paris. In a few years the population of London will be immense, and how is it to be supplied with fresh air if we, of this generation, do not secure all available open spaces as lungs and recreation grounds for the stifling masses? However much this may seem to men of the Ayrton type as sensationalism beneath the notice of political economists, we are persuaded that it is a grave question for those who are interested in the sanitary and moral advance of the people of a city like London; and we, therefore, heartily second the Mansion House Committee, headed by the Lord Mayor of London, in their efforts to preserve the 500 acres of Alexandra-park, with its noble timber and fine views, for the use of the people of this crowded city.

THE PUBLIC MEDICAL SERVICE IN RUSSIA.

THE interest which is now being manifested in Russia in questions relating to the public health is not a little noteworthy. According to the *Journal de St. Petersbourg*, the organisation of a civil medical service is at present occupying largely the attention of the Russian press. In small towns and in the country it is stated to be impossible to supply necessary medical assistance to the populations by private means alone, and the State and provincial assemblies are called upon to provide a public medical service. But assuming that such a service be organised, and conditions acceptable to physicians offered, it is stated that much difficulty would be experienced, chiefly from the comparatively small number of medical practitioners in Russia, to find men properly trained to execute the public duties which it is suggested should devolve upon them. Some governments of the vast empire have already taken measures to form a public medical service, framed to carry out important hygienic and medical duties. This has been the case with the governments of Perm and of Kazan, and the municipality of Yalta. Perm has completed its programme, and called for candidates for the posts created. Kazan has also organised a sanitary bureau, and is about to appoint a medical officer of health with a salary of 1200 roubles yearly, and an assistant medical officer of health with a salary of 300 roubles yearly. The first duty of these officers will be to prepare a report on the sanitary state and medical topography of the government. The arrondissement of Yalta has a population of about 30,000, and the municipality has completed a sanitary and medical organisation remarkable for its comprehensiveness. Yalta has appointed a medical officer at an annual salary of 1500 roubles, five assistant medical officers at salaries of 300 roubles each, and a midwife at a salary of 500 roubles. It has established also a pharmacy for this staff, and a hospital of 20 beds.

But if other local governments were disposed to follow, even at a considerable distance, the excellent example of Yalta, the impossibility of obtaining at present the necessary medical men would prove an insuperable difficulty. Kiatka, recognising this difficulty, has sent ten students to the University of Kazan, which has a Faculty of Medicine, to be trained at the expense of the local government for the public medical service. Kharkow, in 1869, partially to the same end, founded a school for midwives with excellent results. The example of Kiatka in endeavouring to obtain a proper supply of skilled medical officers for its government by having students properly trained for the purpose at its own cost, and thus forestalling the difficulties incidental to the present dearth of medical men in Russia, is justly regarded with the highest approval.

A "COUNTERBLAST."

A DAILY paper publishes a letter from a correspondent in which he graphically describes the discovery of a viper in his boot after bathing at one of our holiday resorts. If the letter had ended here we should not have noticed it; but the writer goes on to give a short *clinique* on the treatment of snake-bites. The advice to "ply the patient copiously with whisky and strong doses of ammonia" is good, and has received ample sanction; but the addendum of "together with an infusion of sound, unadulterated tobacco" we strongly protest against as likely to do incalculable mischief. Numerous instances of the fatal effects of small doses of tobacco are on record, and Sir Charles Bell and Sir Astley Cooper have commented on the rapidity with which the heart's action can be paralysed by its administration. Many years ago our own columns contained the particulars of a case of obstruction of the bowels, in which an injection composed of three drachms of tobacco in a pint of water produced death in an hour and a half. We believe that in America several deaths have occurred from the use of a weak injection in hernia. With regard to the local application of tobacco, there are very few circumstances in which we should recommend its use—certainly not in the bite of a British viper. Tobacco poultices applied to an abraded surface of the skin have often caused death. The first effect of the introduction of the drug into the system in moderate doses, as in smoking, is stimulant; this is owing to the absorption of the carbonic acid and ammonia which it contains. But if a large dose were introduced, as in drinking the infusion, it would act as a powerful sedative, and, if in sufficient quantity, would paralyse the heart and produce syncope. Tobacco may be said to contain two distinct poisons with different lethal aspects—nicotine and an empyreumatic oil; the former kills by its action on the cardiac organism, and the latter by annihilating the functions of the brain without directly influencing the circulation.

NEW VENTILATOR FOR RAILWAY CARRIAGES.

WE hope that the new ventilator attached to the Queen's saloon carriage on the London and North-Western line will be adopted for the benefit of all Her Majesty's railway travelling subjects. Outside the carriage the only unusual objects are three little projections on the roof right over where the lamps are let in. These projections form the caps of the ventilator. The movement of the train causes them to work and keep up a thorough ventilation in each carriage furnished with the ventilator. This is nothing more than an ornamental grating in the interior of the roof of the carriage. Between the grating and the cap outside there is a cavity for the lamp. The cap is so constructed as wholly to exclude wind and rain; it rotates noiselessly; and by an ingenious mechanical arrangement creates an upward current which carries away all impure gases that may be generated. In this way there is no necessity for opening the windows of railway carriages in damp or cold weather; albeit this is the only available means of letting off the foul air that too often afflicts the passengers. The ventilator, moreover, can be fixed upon any railway carriage with no disturbance to present arrangements. Some of them it im-

proves; for, being placed over the lamps, it supplies them with air, and maintains their illuminating power in all states of weather. Nor is it for railway carriages only that it is available. Omnibuses, holds of vessels, and locomotory interiors of all kinds can be ventilated by it, to the incalculable comfort and the improved health of their inmates.

THE EMPLOYMENT OF COLOURED GLASS IN MICROSCOPY.

M. MOUCHET suggests, in the *Monthly Microscopical Journal* for September, the use of coloured glass in the construction of microscopes, in order that sunlight may be employed, and thus replace all the other systems of illumination which are intended to supply the brightness that powerful objectives tend to destroy. He counts four positions that the coloured glass may occupy: before the mirror, under the object, between the objective and the eyepiece, and finally, above the eyepiece itself. To place them before the mirror necessitates the employment of glasses of a certain size; to place them under the object increases the thickness of the plate, and prevents a very oblique light from passing through; whilst to fix them in the body of the instrument causes trouble and a loss of time, for the microscope must be taken asunder. Hence he concludes that the most suitable place is above the eyepiece, and with the object of placing it here he has constructed an apparatus consisting of a kind of revolving diaphragm, pierced by nine openings, each one centimetre in diameter, fitted with glasses coloured to correspond with the rays of the solar spectrum, and placed exactly opposite the eyepiece. This arrangement he thinks will prove very useful in permitting direct solar light to be used.

"A DANIEL COME TO JUDGMENT."

THE medical officer of health for Marylebone is known to be most efficient and zealous in the performance of the very arduous duties which the sanitary supervision of one of the largest parishes in London entails, and to this fact we have had frequent pleasure in testifying. We cannot, therefore, but regret that he should have gone out of his way, as he has done in his last annual report, to bring a charge against "writers of the present day on sanitary subjects," which we venture to think he would have considerable difficulty in sustaining without so limiting its application as to deprive it of all importance. According to Dr. Whitmore, the writers to whom he thus comprehensively alludes, having neither the courage nor ability to deal with evils of great magnitude, are content to attack the minor ones; "they indulge in long hair-splitting controversies as to what constitutes good and wholesome water, but are silent on the wretched homes of our urban poor; they speculate upon the nature and quality of the fever poison which lurks in our sewers, but say nothing of the palpable mischief and danger of overcrowding; they are great in detailing the chemical properties of this or that disinfectant, but express no feasible opinion as to the best practical mode by which the progress of infection may be arrested." Now, with all humility, we say that, having a tolerable acquaintance with most of what has been written on sanitary matters of late years, Dr. Whitmore's sweeping criticism strikes us as a mere hasty generalisation from insufficient data. Supposing it were true that minor evils only had been attacked, yet if those evils are but the parts of which the larger evils are composed, will Dr. Whitmore contend that an enemy repeatedly beaten in detail must not eventually succumb altogether? He argues as if the wretched homes of the poor and the spread of infectious disorders were evidence of the want of courage or ability on the part of those who mainly help to form public opinion on sanitary subjects, whereas nothing is more obvious than that legislation is far behind our present state of knowledge on such matters. Whether or not we shall ever be privileged to see the advent of that "master mind" which Dr. Whitmore thinks is so greatly needed for grappling with these questions, is needless to conjecture; but we venture to predict that the most masterful of minds will pause before adopting Dr. Whitmore's suggestion that the law should enforce the isolation or removal from their homes to hospital of children suffering from scarlet fever. Such a law would press with terrible inequality upon the poor, and it would run hopelessly counter to the whole current of English feeling in respect of personal freedom.

MEDICAL QUALIFICATION IN JAMAICA.

WE regret to announce that the Medical Bill for recognising all and sundry medical qualifications in Jamaica has passed a third reading in the Legislative Council, and received the assent of the Governor. All that remains now to be done to make it law is to procure the assent of her Majesty in Council. Will this be given without consulting either the Medical Council or the medical adviser of the Privy Council? We must hope not. We can have no interest in the qualification of Jamaica doctors further than that we have an interest in the reputation of medicine and in the health of our colonial fellow-subjects. On these grounds we wish to see no diplomas recognised in our colonies which would not be recognised by our own Medical Council. The Legislative Council proposes to recognise all diplomas recognised in Canada or any other British colony; all diplomas granted after a course of study and examination equal (in the estimation of a Medical Council consisting of five registered practitioners, to be created under this Act) to those required in the case of British diplomas; and diplomas granted by the Medical Council just mentioned. It is easy to understand that under one or other of these conditions almost anybody may become legally qualified to practise medicine in Jamaica. The Medical Council of five persons is to be an examining body. It may contain members with whom scientific men possessed of reputable diplomas will not act, and so it may come to be a mere instrument for introducing imperfectly educated members into the profession. We sincerely hope that such a Bill will not receive the assent of her Majesty in Council. After late disclosures of the traffic in diplomas and degrees, we need to be more than ever careful in recognising them.

PHYSIOLOGY OF VOMITING.

EXPERIMENTS have lately been conducted by Herren Kleimann and Simonowitsch, in Herrman's laboratory, to corroborate or overthrow the statement made last year by Grimm, that a longer time was required for tartarised antimony to act when it was injected into the veins than when it was introduced into the stomach. The results they obtained fully support Grimm's observation. These experiments are, therefore, strongly opposed to the idea of there being, as some have imagined, a nervous centre from which the impulses occasioning vomiting proceed, for it would clearly be contrary to all analogy that a substance acting directly upon the brain should act more slowly and more feebly when injected into the blood than when it is gradually and imperfectly absorbed from the stomach. They maintain, on the contrary, that the salt acts on the peripherical extremities of the nerves distributed to the stomach, the specific action it possesses inducing vomiting. It seemed probable, if this view were correct, that even

when the salt was injected into the blood, only the portion circulating in the gastric walls, or contained in the secretion, was the really effectual substance in producing vomiting. To ascertain this, they tested the first material ejected in vomiting in a number of dogs into whose veins tartar emetic had been injected, and found that it always contained some of the antimonial salt. The fact that efforts to vomit may still occur after the stomach has been excised they do not regard as at all opposed to their view, since the salt may act on the peripheric extremities of nerves supplying the œsophagus or intestine, which also may have the power of inducing vomiting reflectorially.

A CORONER'S SUGGESTION.

WE have heard that the clergy, as a body, have before now been known to take blame to themselves on account of the sinfulness of their flocks. Surely the medical profession may do the same, on account of the ignorance of the public on all matters which are related to the art of healing. We read that an inquest was lately held on a poor lad who died from hydrophobia, and that the coroner, on being told there was "no known cure for the disease," expressed surprise that it had never been made the subject of special investigation, and won over the jury to make a recommendation to the grand jury to the effect, that Government should offer a reward for the discovery of a cure "such a reward as would induce the principal men in the profession to enter upon an inquiry into the subject." The coroner is, of course, a legal coroner, and we hardly know whether we ought to feel pleasure in his evident belief that the principal men in the profession could find out a cure if they were to try, or pain that he should know so little of them as to imagine that any reward is needed to stimulate their activity. We can only assure him that the legal maxim about every wrong having its remedy does not apply in the world of nature; and that we are reluctantly compelled to recognise the existence of many poisons for which there are no antidotes in our hands. We shall perhaps learn more about hydrophobia, as we shall about many other diseases, by the steady progress of general research into the functions and the derangements of the nervous system; but for this steady progress we must labour and wait, and attempts to hurry it in any special direction could conduce to no result but disappointment.

THE TIVERTON HOSPITAL DISPENSARY.

WE would direct attention to a communication in another part of our present number, by which it will be seen that four out of five of the medical staff of the above institution have tendered their resignation as its honorary medical officers. The facts of the case are shortly these—at least, as far as we have been able to ascertain. The situation of house-surgeon and dispenser having become vacant, an advertisement for a successor was inserted in our advertising columns. A well-qualified gentleman, who had completed his medical education and possessed high testimonials, applied for the appointment. The other candidate was a pupil of a medical practitioner with great local interest, resident in Tiverton, who has been employed in dispensing medicine during the last fifteen months; and as his appointment seems to have been made in opposition to the views and wishes of four out of the five medical officers of the institution, they have intimated their intention of resigning their posts after the 29th inst. The chief argument, we believe, that influenced the committee in favour of the local candidate was that, as his father resided in the town, where his character was well known, it was advisable to select him in preference to a stranger.

The reason why we allude to this matter at all is, that it affects a principle. We know nothing of the relative merits of the candidates, but, assuming the moral character of the applicants to be equally good, we hold that every appointment of this kind should be made on the ground of professional merit and fitness for the office. The post is an important one, and the medical officers certainly ought to be the best judges of the respective qualifications of those seeking it. Setting aside the unfairness to the candidates from a distance, who have the trouble of applying for the appointment, we think that the opinion of the medical staff on a question of this kind ought to be respected and acted upon.

THE EMPRESS CHARLOTTE.

ACCORDING to a letter (seemingly well-inspired) in the *XIXe Siècle*, the Empress Charlotte maintains her physical health, not only unimpaired, but to some extent improved, while her mental derangement has reached the last stage of imbecility. She lives estranged from all her family, resolutely declining to see either the King or Queen, who are forced to content themselves with catching a glimpse of her during her occasional walks in the grounds of the Château Tervuerer. Her physicians have abandoned all hope of her restoration to sanity, while they augur favourably of her general health. Her mind still dotes on her lost empire, and all her caprices, and they are many, run in the direction of imperial state pageant. She constantly dispatches telegrams to Napoleon III., who, she believes, still reigns; and, saddest of all, the name of Maximilian is seldom off her lips. Her whole attitude, moral and intellectual, is that of the Carthaginian Dido—

"Infelix, utcunque ferant ea facta minores."

THE METROPOLITAN ASYLUMS BOARD.

THE Committees of the Board met last week, and the reports submitted by them recite that there is now a total of 3300 imbecile patients under treatment in the two asylums at Leavesden and Caterham; that there are 11 fever patients in the Stockwell and 25 in the Homerton hospital, and 46 cases of small-pox at the latter establishment and 38 at Stockwell. The members were occupied for some time in a discussion relative to the desirability of utilising Hampstead Hospital, which is being thoroughly cleaned and disinfected, for the accommodation of imbeciles of the infirm and bedridden class. The managers are unanimously in favour of the scheme, but are still opposed by the Local Government Board. The subject was eventually ordered to stand over for further consideration. The Committee very naturally wish to get rid of the *Dreadnought* as quickly as possible, as the City Corporation are now responsible for the sanitary condition of the port. The General Purposes Committee of the Board have purchased ten acres in the south-east district of London for hospital purposes, for which £1000 per annum is to be paid.

REACTION OF LEUCÆMIC BLOOD.

IN one of the last parts (Heft 1, Band viii.) of the *Zeitschrift für Biologie*, Dr. Mosler states he has had an exquisite case of splenic leucæmia under his care, and that on examining the reaction of the blood he found that it did *not* present, as has sometimes been stated, an acid reaction. On the addition of a little tincture of litmus, and exposure to a warm room, the colour turned red after four days. The defibrinated blood placed in a graduated tube with twenty-four divisions, and allowed to remain at rest

for twenty-four hours, gave the following results:—1. The upper layer of clear serum occupied five divisions; beneath this was a layer of colourless blood-corpuscles occupying seven divisions, and the remaining twelve were occupied by red blood-corpuscles. The proportion of the white to the red corpuscles was thus very nearly as 1:2. The patient was forty-four years old, from Uckermünde, who had had ague twenty years, and again eight years, previously. A year after presenting himself he had pain and a swelling in the left side. He had well-marked retinitis leucæmica. He was treated, apparently successfully, with cold douche baths directed to the region of the spleen and with large doses of quinine.

THE WOLVERHAMPTON AND SOUTH STAFFORDSHIRE HOSPITAL.

THE great opportunities for the observation of surgical practice and for the pursuit of clinical study afforded by many provincial hospitals are not, we think, utilised to the extent that they might be, except where these exist in connexion with a medical school. The practical knowledge that is capable of being attained at some of our large county hospitals is very considerable, and we are glad to notice and give publicity to the procedure adopted by the medical committee of an institution like that of the South Staffordshire Hospital, which contains 200 beds, with large accident, surgical, and medical wards, departments for diseases of women and children, a separate wing for fever, and an out-door department. Instruction of a practical kind is afforded in the hospital, and those intended for the medical profession who can make use of such opportunities for acquiring a good professional groundwork and an elementary knowledge of medical subjects and professional details previously to entering upon their studies at a medical college, will unquestionably soon discover the advantage of having undergone such a preparation and training. The surgical practice at Wolverhampton and its neighbourhood is large, the operations are publicly announced, and practitioners are invited to attend.

DUBLIN SANITARY ASSOCIATION.

DR. CHURCHILL presided on Thursday, the 19th inst., at the hebdomadal meeting of the Working Committee of this Society. Reports were read as to the abatement of nuisances and as to the condition of the Corporation depôts. Tracts for distribution on hygienic matters were received from the Secretary of the Ladies' Sanitary Association of London; and the report of the Sub-Committee for the Inspection of Nuisances was adopted, and a copy of it forwarded to the Secretary of the Public Health Committee. The Sub-Committee was requested to inspect the sanitary condition of Blackhall-street district and other localities; after which the meeting adjourned till next week. Dublin seems fairly in earnest as to the abatement or removal of the hygienic blots on her municipal character. So long as "home rule" finds an outlet for its energies in this direction, the movement will enlist the sympathy and support of all parties.

WATKINS VERSUS MEERES.

THE proceedings in the late action of Watkins *v.* Meeres having excited much indignation in the town and neighbourhood of Melksham, it was decided that some general expression of sympathy and respect was due to Dr. Meeres. A public meeting was consequently held on the 10th inst., the proceedings of which are reported in the *Wiltshire Independent*. The friends and patients of Dr. Meeres have since forwarded him a very kind and flattering address, accompanied by a cheque for £120, to defray the expenses to which he had been put in his defence. An appeal was made to the profession through the columns of THE LANCET to aid Dr. Meeres in bearing the pecuniary cost of the late action; but we are glad to learn that, in consequence of the receipt of this sum, Dr. Meeres will not be at all seriously injured by the expenses, and we heartily congratulate him on the expressions of sympathy and respect that have been called forth.

THE PUBLIC HEALTH ACT AND LOCAL SELF-GOVERNMENT.

IT is stated that the Town Council of Nottingham have come to the determination not to take advantage of the provision made in the Public Health Act for the payment, under certain conditions, by the Local Government Board, of a moiety of the salaries of medical officers of health and sanitary inspectors. The Council look upon the conditions entailed by such a grant as destructive of the independent character of local government, and as having too much of a centralising tendency. If local authorities prefer to retain as much power in their own hands as possible, and are prepared to pay for their whistle, nobody can blame them. Nottingham's example will likely enough have many followers among our English towns.

RATING OF HOSPITALS IN SHEFFIELD.

THE managers of the Sheffield Public Hospital, having appealed against the rating of the hospital to the Assessment Committee of the Sheffield Union, the Committee has resolved to adjourn the appeal, and to do nothing further until the decision has been given in the case of the St. Thomas's Hospital. Dr. J. C. Hall, the honorary secretary, drew attention to the system adopted in Birmingham—namely, not to rate the building, which was not profitably used, but simply to rate the land on which it stood.

AT Darlington, thirteen summonses were made returnable on one day (the 23rd inst.) against parties who refused to have their children vaccinated. In some of these cases the defendants had been fined several times, and in no case was it a first offence. Fines of 10*s.* and costs were levied in nine of the cases, in three others orders were made, and one was dismissed. Darlington, from some cause or other, would seem to offer favourable soil for the doctrines disseminated by the Anti-Vaccination League.

WE direct attention to an important letter from our Commissioner in another column, on the health of Jersey. The absence of a provision for securing a medical certificate of the cause of death is a monstrous anomaly at this time of day; and we cannot believe that another session of the States will elapse without making such a provision.

THE Andersonian University of Glasgow has undergone some changes in its professoriate. The chair of Natural Philosophy has been given to George Forbes, Esq., B.A., St. Catherine's Hall, Cambridge, and that of Medical Jurisprudence (vacated by the transfer of Dr. P. A. Simpson to the old University) has been conferred on Dr. Lindsay. Mr. Tennant, of St. Rollox, has presented £1000 to the Andersonian University.

DENGUE FEVER rages so severely at Madras that prayers are offered up in the churches for the abatement of the disease. In Black Town it is stated that 80 per cent. of the inhabitants have been down with dengue.

DURING the Winter Session Mr. Alfred Haviland will deliver his usual course of lectures on the Geographical Distribution of Disease at St. Thomas's Hospital, due notice of which will be given. The Geographical Distribution of Death by Lightning and by Asiatic Cholera will form the subjects of the new lectures.

LADY AUGUSTA STANLEY, whose name is associated with numberless gracious acts of benevolence in Westminster and its neighbourhood, has presented the guardians of St. George's, Hanover-square, union (of which Westminster now forms a part) with a stretcher to be used in conveying the sick poor to and from the ambulance.

ONE cannot be much surprised that paupers object to be fed occasionally on Australian meat, when guardians assert that there is no nutriment in it. At the St. Pancras board meeting last week, two of the members protested against the use of this meat, while another objected to the introduction of pickled pork into the dietary!

THE following incident is reported as having occurred at the last meeting of the Hornsey District Board of Works. "The clerk reported that no medical officers had been appointed under the Public Health Bill (*sic*) of 1872." The Chairman: "Then leave it alone." (A laugh.)

THE Medical Association of America have adopted a resolution to the effect that the members of the Association should discourage the use of alcoholic stimulants in treatment.

M. THIERS, the President of the French Republic, has been suffering from a severe sore-throat, the result of a cold produced by the recent changes of temperature.

STAFF-SURGEON WILLIAM LONEY, R.N., has been promoted to the rank of Deputy Inspector-General of Hospitals and Fleets, in the vacancy caused by the death of Dr. Bernard.

JERSEY

FROM A SANITARY POINT OF VIEW.

(*From our Special Commissioner.*)

EVERY Englishman with any pretensions to a reputation for taste or travelling has been, or intends to go, to Jersey. The best testimony to the attractiveness of the Channel Islands is, that so many people submit to all the discomfort of the sea voyage to visit and—more wonderful still—to revisit them. This test is really a very significant one, according to the experience of your commissioner. Sir Benjamin Brodie is reported to have said, "If you want health for the body, rest for the mind, sea-bathing, pure air, splendid scenery, and all God's gifts that go to make a terrestrial paradise—then I emphatically advise you to go to Jersey." I need not spend time in describing minutely what everybody admits—the beauty of Jersey; its picturesque bays; its "lovers' lanes"; its fine drives; and its kindly climate, so favourable to flowers and fruits, as well as to the bountiful crops on which the life of the people so much depends. As an example of the last part of this statement, I may mention that it has been estimated that this year the island of Jersey alone has sent £200,000 worth of potatoes to England. The object of the present communication, however, is specific, and has reference to the sanitary condition of Jersey. Jersey is a health-resort. A large section of the inhabitants are not Jersey-born, but find themselves resident there for the sake of the climate. It is of the first moment, therefore, that no effort should be spared to make Jersey healthy. There is a tendency in all beautiful places to apathy in health matters. The authorities are apt to rely on natural advantages. And, according to my observation, it is so in Jersey.

It will scarcely be credited that in Jersey there is no ascertainment of the cause of death. The looseness of the information upon which the registrar registers the cause of death would be amusing if it were not really very serious. Mr. So-and-so will send down a note with a messenger to the registrar, with his compliments, requesting him to be kind enough to register the death of his wife, which happened last night. The messenger will be asked the cause of death, and according to the information given will be the entry in the book. It is amazing that an intelligent community, within a hundred miles of England, should have gone on for a generation with a system of registration more worthy of the South Sea Islands than of it. This loose registration has two consequences—one, that exact information as to the great causes of death cannot be obtained, so that it is difficult to say to what extent the diseases of which the people die are preventable. Secondly, it offers an obvious advantage to unprincipled persons who may contemplate the destruction of life by poisoning. People of this class have only to transfer themselves and their victims to Jersey, and death can be registered with no difficulty. Even if the complexion of the circumstances is suspicious, and the medical man on being applied to refuses a certificate, there is nothing in the law of Jersey to require one, and the death will be registered, on common information, as one occurring from disease. These evils of registration are aggravated by the fact that there is no Medical Act in force at present in Jersey giving any advantage to the qualified practitioner over the quack. I believe that the profession in Jersey would to a man be willing, if required by the law of the States, to give a certificate of the cause of death. This, however, does not seem to have always been the case. The late Mr. Jones, whose brilliant surgery gave lustre to the island, had, I have been told on good authority, a great objection to give information of the cause of death. He was the sole surgeon of the Jersey Hospital, in accordance with an objectionable system by which there is only one medical man to the hospital, which has the double character of a hospital and a workhouse. It was of importance that he should certify the cause of death. But when asked to do so, he replied: "Oh, no; it is quite unnecessary. You can divide all the deaths that happen into four classes, according to age: all deaths above sixty as caused by old age; all below five as caused by atrophy or diarrhœa; and the deaths between those ages may be divided into two equal sections, those caused by phthisis and those caused by fevers." It is not to be wondered at, when a man of special influence and authority takes such a view of death registration, that the island is backward in this respect. Now, however, the profession is decidedly quite ready to help in a better system, and it is to be hoped that their help will soon be asked by the States. Moreover, the public is becoming intelligent in these matters, and will require a more perfect system.

In the absence of official and definite information as to the prevailing sickness and causes of death, one could only fall back on information supplied by the practitioners of the place; and this left no reasonable doubt that the sanitary condition of this beautiful island is most unsatisfactory. The great test of the sanitary condition of a place in the months of summer and autumn, as we all know, is the prevalence of the diarrhœal class of diseases; and these—to wit, diarrhœa, dysentery, and typhoid—have been during late weeks very prevalent, and in not a few cases malignant and fatal. Mr. Jones's classification, loose and finely simple as it is, gives the sanction of his great authority to the statement of the frequency of fever in Jersey; for, as I have said, he proposed to attribute all deaths between five and sixty to two causes, phthisis and fever. The records of the dispensary of St. Helier's, with a population of 30,000, give in various years a significant fever mortality. Thus in 1861 there were 141 cases of *typhus*, with 10 deaths; in 1864 there were 28 cases of fever, probably *typhus*; in 1869 there were 60 cases of typhoid; in 1871 there were 17 cases of typhoid, 3 cases of continued fever, and 10 of febricula. The mortality from fever in 1864, said, however, to be typhus, led to an examination of the water, which was found much contaminated with organic matter; and this seems to be the case still. From my own inspection I can say that in the worst parts of

the town the provisions for the removal of sewage are really provisions for its retention about the soil of the house; and that the privies, which, in some cases at least, are never emptied, are on the most friendly terms with the wells from which the water-supply is drawn, unless, as in one case which came under my notice, the water be so undrinkable as that the supply was fetched from a more distant well. There is a water company, whose water is brought from a distance, but the use of it is not compulsory. Jersey people don't like to be compelled to do anything, even if it were something to save them from typhoid. What I saw of the intimate relation between wells and privies in St. Helier's coincides with a description I received from a medical man of the sanitary condition of Gorey, which I give:—"In the neighbourhood of Gorey there is a large number of cases of dysentery, and there have been several deaths. I examined the wells from which many of the families draw water; it is deep, under sandy soil, and is from twelve to eighteen feet from the front of a dwelling-house. About the same distance to the back of the house is a cesspool, and about twenty feet from the well, in a corner of the garden, is a privy, which is never cleaned out, and the inhabitants have no idea where the fæcal matter goes."

The best thing I can say about the sanitary evils of Jersey is that they seem to be realised by the local press. To make such evils public as I have mentioned is to compel the remedy of them. The remedy of them would be easy and simple; and unless they are remedied medical men cannot advise Jersey as a place of residence. The States should immediately enact a law that will require the cause of each death to be certified by the medical attendant, and when such a certificate is not forthcoming the facts should be investigated by the coroner. The use of well-water should be discouraged, if not prohibited; and steps taken to procure a constant supply from the water company. Moreover, privies should be converted into waterclosets, and, pending the change, they should be emptied at regular intervals of not more than a month. As it is, the ground must be saturated with sewage, and the wells, of necessity, contaminated. Jersey should be able to show a very low mortality, instead of which its mortality is high. Thus, in 1869 the mortality of Jersey was at the rate of 23·20 per 1000; that of St. Helier's 26·30. In 1870 the mortality of Jersey was 21·38; that of St. Helier's 23·18. In 1871 the mortality of Jersey was 21·42, and that of St. Helier's 26·04. This, in a climate so genial, in which some diseases are conspicuously absent or infrequent, is discreditable. By way of contrast, I may instance the mortality of the Isle of Wight and of Eastbourne, which are respectively 17 per 1000, and of Worthing and Hastings, which are respectively 18 per 1000. The average death-rate of England and Wales is only 20 per 1000.

Some diseases seem very rare in Jersey, amongst them acute rheumatism and stone. There has been only one operation for stone in the island for ten years. Phthisis is common among the natives, partly owing doubtless to the poor food upon which they live, principally a thin kind of broth. Jersey is another amongst many illustrations that merely a genial climate does not prevent tubercular disease. My letter is already too long, but if it leads to sanitary reform in Jersey you will not only do Jersey great service, but the many tourists who wish to act on Sir Benjamin Brodie's advice and see this delightful island. And you will help to remove evils which must seriously deter medical men from sending patients to Jersey.

CENTRAL CRIMINAL COURT.

(*Before* Mr. JUSTICE LUSH.)

CHARGE OF MISDEMEANOUR UNDER THE LUNACY ACTS.

ALEXANDER OGILVIE, on September 24th, surrendered to his bail on the charge of having unlawfully signed a medical certificate, whereby one Charles Mills was admitted into a house for lunatics.

Mr. Poland for the prosecution said that the defendant was indicted under the 16th and 17th Vic., cap. 96, sec. 13, which enacted that any physician, surgeon, or apothecary who signed any certificate, or did any act not a misdemeanour, should for each such offence forfeit a sum not exceeding £20; and any person who falsely signed a certificate, not possessing the necessary qualifications, should be declared guilty of a misdemeanour. The defendant signed "Alexander Ogilvie, Surgeon, R.N." (Royal Navy), on the certificate, and the second signature having been previously obtained, the patient was removed to the Peckham Asylum. The certificate having been forwarded to the Commissioners of Lunacy in Whitehall, they sent a request that the signataries would more fully describe their qualifications; and on the certificate being forwarded to the defendant for amendment, he added, "M.D. St. Andrews, 1828." It was subsequently ascertained on inquiry at the Admiralty that the defendant was not registered under the Medical Acts at all, that he was not a surgeon in the Royal Navy, and that he had had no connexion with St. Andrews. On the 6th of August the Commissioners of Lunacy ordered the discharge of the patient, who was then declared to be cured, having been in confinement since the 20th of July.

Mr. Justice Lush observed that this was the first case in which the Court had been called upon to inflict punishment for a breach of the section of the Act referred to by the learned counsel for the prosecution. He had now, for the first time, to determine what was the proper punishment for such a violation of the Act as had been proved before him. The statute gave him no means of measuring the punishment, but merely classified the offence as one which might be dealt with by fine or imprisonment, or both. In short, there was nothing to guide him in the Act, and no precedent such as was furnished by former decisions. He had, therefore, to consider the mischief which the Act was intended to prevent; and, looking at the circumstances of this case, he did not doubt that the defendant's intentions were free from moral blame, and that he neither signed the certificate for any bad purpose of his own, nor with the intention of lending himself to any bad motives on the part of other people. The Act under which the defendant was indicted was intended for the good treatment of unhappy persons deprived of their mental powers, and as a bar to the machinations of evil-minded people, and, with that view, it required that before any subject was deprived of his liberty and shut up in a lunatic asylum, a request to that effect should come from a relative, and be accompanied by certificates from two medical men. He thought that, under all the circumstances, the justice of the case would be met by the imposition of a fine of £50, and he should direct that the defendant be kept in custody until the fine was paid.

Correspondence.

"Audi alteram partem."

UNSKILLED MIDWIFERY.

To the Editor of THE LANCET.

SIR,—I am rather surprised that more notice has not been taken of Mr. Gay's letter, and your own annotation on the above very important subject. "Where there is a wrong there is a remedy," is a very old and true saying, and one that no doubt holds good in the present instance. Will you allow me to point out what, as it seems to me, is the cause of the wrong, and how it may be remedied?

The practice of midwifery in this country has never been very remunerative, practitioners preferring to attend for an absurdly low fee rather than lose the patient, and with her the family practice. Young men commencing practice in large towns consider themselves extremely moderate in their demands when they name a guinea as their minimum midwifery fee; but they soon find that it is hopeless to compete on the same terms with men who have been twenty or even thirty years in active practice, and grown grey in constant attendance in the lying-in chamber. Can it be wondered at, then, that midwifery is unpopular with the rising generation of practitioners, and that much of it is left to druggists, unqualified men, and midwives? In smaller towns fees are even less, and a guinea is the maximum rather than the minimum.

Surely it is now time that a determined stand should be made against such a system of underselling each other and making ourselves cheap. Surely, though doctors may and must differ on many matters of opinion, we may all acknowledge it as a fact quite beyond dispute, that we are underpaid, and especially as regards the services rendered by us in labour cases; above all, the most weary, anxious, trying cases that can occur to us in the whole range of general practice. Surely it is anomalous, to say the least, that there should be a scramble between newly-fledged bantlings of college and hall and grey-headed veterans for guinea midwifery!

I contend that in these days of costly living, increased prices, &c., medical fees should rise also, and that the orthodox guinea should be the minimum midwifery fee, without including more than one subsequent visit; while for practitioners of say ten years' standing, under no circumstance whatever should a fee of less than two guineas be demanded. The oft-repeated phrase, "I attend her because she is an old patient" (for half-a-guinea, or fifteen shillings, or a guinea), is less a reason than an excuse, and a very lame one too. A general raising of midwifery fees will, I am sure, tend more than any other measure to make its practice popular among commencing practitioners, and thus to lessen the proportion of unskilled midwifery.

But of course there are many persons who cannot afford to pay a guinea; for them the provident dispensary affords a means of securing duly qualified and skilled obstetric assistance on the one hand, and of enabling patients to contribute according to their means, and to cultivate habits of thrift and providence, on the other. I hope that all who read this will advocate the cause of such charities, and that ladies will be induced by their medical advisers to subscribe to institutions which help people to help themselves, rather than to pauperise them altogether, and encourage the belief that medical assistance is to be had for the asking.

I am in hope that some day these provident dispensaries may be so extended as to reach the very lowest strata of town and country populations, and that there may be no necessity for midwives. But for the present such must be considered as necessary evils. I would suggest that licences should be granted to duly-educated women, after examination, such licence to be renewed annually, and to be forfeited on any case of neglect or misconduct.

The practice of midwifery by druggists &c. ought to be made penal, and I think this would be done were it brought prominently to the notice of the Home Secretary by the leading obstetric practitioners.

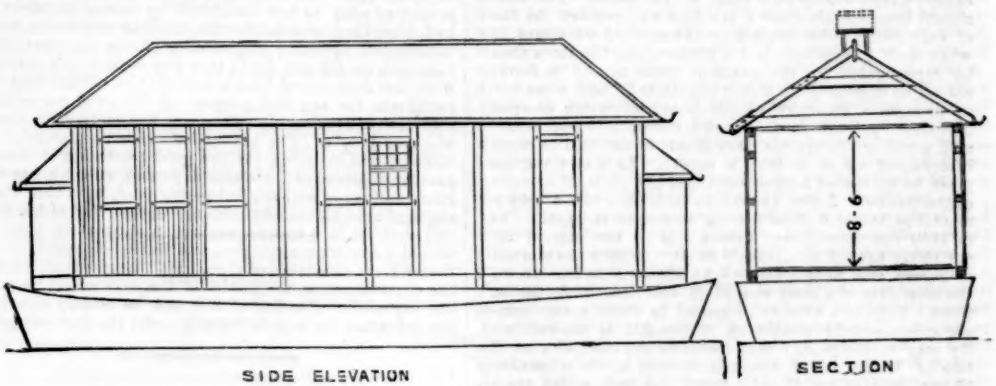
I am, Sir, yours, &c.,

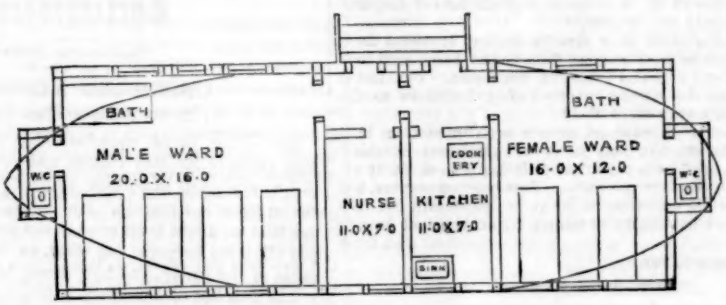
Sept. 19th, 1872. OBSTETRICUS.

FLOATING HOSPITALS FOR CHOLERA PATIENTS.

To the Editor of THE LANCET.

SIR,—Through the kindness of J. L. Clemence, Esq., architect, I am enabled to send you an elevation, plan, &c., with a few particulars of a "floating hospital" designed by him for the Lowestoft Improvement Commissioners, and





PLAN

which is referred to in last week's LANCET as being selected by the Medical Department of the Local Government Board as one that is especially suited for the reception of cholera cases from shipboard.

The hospital, which does credit to the sagacity of Mr. Clemence, was built by Lucas Brothers, upon an old forty-five ton wherry or barge.

The architect states that "it is constructed of timber framework covered on the outside with weather-boarding, and inside with rough-sawn boarding whitewashed over with two coats of lime-white. The roof is lined with boarding and covered with asphalte-felt paid over with two coats of gas-tar and sand and two coats of lime-white. Ventilation is obtained by means of windows at the sides, and also by a movable ridge to the roof, perfect command of which is obtained by means of lever and cord. The cost of the building, including the value of the old wherry, was £151, but including moorings and sundry other expenses, £220."

I am, Sir, your obedient servant,

W. H. CLUBBE,
Surgeon to the "Infirmary.

Lowestoft, July 30th, 1872.

IRELAND.

(From our own Correspondent.)

THE Dublin Artillery Militia having been called out for training until the 12th of October next, a camp was lately formed for them close to the Pigeon-house Fort. The locality pitched upon by the military authorities has proved a most unfortunate one, the foundation having been dredged from the bed of the Liffey, and being nothing but a mass of refuse taken from the sewers of the city. As a natural result, the unwholesome effluvia and want of proper drainage have given rise to attacks of diarrhœa, catarrh, and rheumatism in a large proportion of the regiment. Complaints having been made by the medical officer in charge that the place was extremely unwholesome and perfectly unfit for the purposes required, the attention of the authorities, after a good deal of unnecessary delay, was directed to this condition of affairs, and Major-General Sir Thomas Steele, Sir H. Havelock, Col. Nugent, Col. Maude, &c., visited the camp last week to report upon the complaints made. After their visit 250 waterproof sheets, 250 cholera-belts, and 250 extra blankets were supplied by the Control Department. Sir Thomas Steele recommended that these measures should be merely matters of temporary precaution, and awaits further orders from head-quarters. Why the camp was not at once struck, and the men removed to the Pigeon-house Fort close at hand, seems one of those mysteries perfectly inexplicable to the uninitiated, especially as not only had several of the men been sent to the Military General Hospital, and to Beggar's-bush Barracks Infirmary, as a result of their exposure, but it is also stated on reliable authority that a large percentage of the nominally effective are suffering severely from "camp disease." It should, however, be added that these latter are allowed to proceed to their lodgings and receive "home stay" money. But the whole affair seems one deserving of a most searching inquiry, as some one must be to blame for the present unsatisfactory condition of things.

The guardians of the South Dublin Union, at a meeting held lately, passed a resolution granting compensation to the medical officers of the union for their services during the small-pox epidemic. But at another meeting held since a communication was read from the Poor-law Commissioners, intimating that the medical staff, whether of the house or the rural districts, were not entitled to receive any compensation. This roused the ire of the guardians, who refused to be guided by the Commissioners, the chairman stating that the letter was only written by the Commissioners as an exercise of their power. A motion was then adopted on a division by 11 votes to 4, that the resolution of the Board should not be rescinded. How the commissioners will act it is difficult to determine, but it seems an ungenerous act to refuse their sanction to the £20 voted to each medical officer of the Union for their dangerous and harassing services during the outbreak of epidemic disease, and to which they are well entitled.

In consequence of a want of proper accommodation in Nenagh Workhouse, the late cases of small-pox in the Union have not been properly treated, being placed in the same wards with the fever patients. This has been reported to the Poor-law Commissioners by their inspector, and it has been resolved that extra accommodation shall at once be provided.

Dublin, September 24th, 1872.

PARIS.

(From our own Correspondent.)

THE attention of the medical circles here is now almost exclusively directed to the session of the French Association for the Advancement of Science at Bordeaux, which has been very successful, and promises much for the future. The medical members of the Association have contributed most actively to its success, and in numbers form a great majority among the associates.

All the heads of the profession in Paris are absent (many of them having gone down to Lyons and Bordeaux), and the wards of the hospitals are now generally under the care of the junior physicians and surgeons. One of the Paris surgeons, however, has remained faithful to his wards, notwithstanding the vacation time; I mean Dr. Léon Labbé, of La Pitié, whose "service" has become quite a place of rendezvous for the foreign students and doctors who are now doing Paris; and on Tuesdays and Saturdays a goodly number of English, Americans, Spaniards, Brazilians, and others, are to be met with there.

The Academy of Medicine has not suspended its sittings, and on Tuesday last two very excellent communications were read. Dr. Barth, in a discourse remarkable for great elegance of style, described to the members a disease which he had observed in Fiume and Illyria—namely, the *scherlievo* of those countries. Coloured drawings were handed round to illustrate his descriptions. Dr. Barth believes that the disease is developed by varied and unusual manifestations of syphilis. The medical men of Illyria do not, however, agree with him. They believe that the disease (which is endemic in the country) is a special one, of its own kind, and having nothing to do with syphilis. The latter portion of the sitting was occupied by the other communication—a startling one; wherein its author, M. Davaine, gave the results of various experiments which he has made on septicæmia. M. Davaine inoculates the putrefied blood of an ox on a rabbit or a guinea-pig, and it becomes septicæmic. This septicæmic blood is inoculated from a first animal to a second one, from the second to a third, until he reaches the fourth animal; and then it is enough to take a drop of blood coming from this last subject, and to dilute it to a trillionth degree, in order to cause death in an animal of the same kind. The members were so surprised at this communication of their respected colleague that they felt some relief when Dr. Bouley stood up and questioned the results of the experiments. We shall see how they will be confirmed by other experiments which are to be carried on by Dr. Bouley and others.

The health of Paris is still good, although the weather is cold, and winter affections are beginning to appear. Bronchitis, pleurisy, and all kinds of chest disorders are accompanying the first approaches of the winter season.

Paris, Sept. 2nd, 1872.

BORDEAUX.

(From an occasional Correspondent.)

SESSION OF THE FRENCH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

IN my last letter I related the proceedings of the meeting during the first two days of the session. I shall now proceed to describe the most important events of the three following days.

Saturday (the 7th inst.) was taken up by an excursion to Arcachon—that most agreeable resort for sea bathing. Arcachon is most pleasantly situated on the large basin of the same name formed by an inlet of the sea. It is environed by pine woods, and sheltered from all winds; thus forming a very valuable winter resort for invalids. The important scientific feature of the excursion was a visit to the oyster parks which abound in the basin. Interesting lectures on ostreiculture and its most recent improvements were given.

Sunday (8th) was also an excursion day. About 100 of the members and several ladies went by rail to Eyzies and the neighbouring localities to visit the former habitations and traces of the Troglodites, a description of whom had been given by Professor Broca, as I mentioned in my last letter.

Monday (9th) was a working day. The sections met as before, at about 10 A.M. In the Medical section, Professor Paul Dupuy, of this town, read a memoir "On some Desiderata of the Theory of Animal Heat." The orator investigated the question from a triple point of view. 1. What is the seat of the chemical actions which produce animal heat? M. Dupuy disputed Frankland's theory, that mechanical work requires nutriment essentially formed of fatty and amylaceous substances. 2. How does the transformation of forces take place? 3. What is the mode of action of dynamophoric aliments? Alcohol, coffee, tea,

cocoa, arsenic, exaggerate various functions, but they do not exaggerate chemical actions, and their own combination does not suffice to explain the production of force which follows their ingestion. Does it then follow, asks M. Dupuy, that chemical actions are not the producing cause or principle, but are merely the conditions of various functions—especially intellectual activity?

Dr. Fleury (of Bordeaux) read a paper in which he investigated the dynamism of the two cerebral hemispheres. The anatomical study of the brain and clinical facts have shown the functional inequality of the two hemispheres, the left hemisphere being superior to the right. Dr. Fleury explains this by a greater flux of blood to the left hemisphere. This fact he has discovered by numerous measurings of the jugular veins, and by inferences from physical laws.

Dr. Leudet (of Rouen) read the notes of a case of "unilateral ephidrosis," and related three other cases on record. All four were patients suffering from nervous disorders. Dr. Leudet thought ephidrosis depended on the vaso-motor system.

At a later meeting, which took place at 9 P.M., Dr. Bitol read a paper "On the Action of Veratria in Cardio-vascular Affections which have not yet reached the Cachectic Stage." The paper related various experiments carried on in the laboratory, and numerous clinical observations, from all of which Dr. Bitol draws the following conclusions:—1. Veratria is an invaluable agent in vascular disorders. 2. It is especially suitable in the disorders which accompany functional hypertrophy of the heart. 3. In respect to the heart (unlike digitalis) it is atonic and hyposthenisant. 4. It does not exert a spoliating action like digitalis, therefore its protracted use does not entail the same dangers. 5. Its office seems to be one of direct compensation. In exciting the sensibility and contractility of animal life, it lulls the morbid activity of the nervous system and of the contractile fibres of vegetative life. 6. Its action is quite distinct from that of digitalis; consequently, when digitalis is powerless veratria must be used. 7. Like digitalis, veratria should not be employed in the ultimate stage of cardio-vascular affections. 8. It should be tried in all diseases which affect the nervous system.

Professor Trélat communicated a note "On Lymphosarcoma, or Lymphadenoma," in which, after having described these lesions, he concluded that surgical interference should not be employed.

Dr. Liétivant (of Lyons) related several cases of "Substitution of Mobility and Sensibility after Nerve-sections." After relating five cases bearing upon the subject, the orator concluded thus: "Surgeons will be less timid when they have to deal with cases which require neurotomy, since they now know that, notwithstanding the section of the nerve, mobility and sensibility will persist, and will acquire, by use, a high degree of perfection."

In the Anthropological section Dr. Topinard described an instrument for measuring the cranium in its natural position.

M. Delfortie read a paper on the "Prehistoric period in the department of Gironde"; Dr. Parrot described the Grottoes of Excideuil; Dr. Prunières presented an interesting collection of specimens taken from the grottoes and dolmens of Lozère; a Spanish Professor from Madrid described the actual condition of prehistoric researches in Spain.

In the Botanical section Professor Baillon read a paper of the highest interest on "Rheum Officinale." He mentioned that real specimens of China rhubarb are now growing and being acclimatised in the garden of the Paris School of Medicine.

In the Zoological section the debates were devoted almost entirely to the question of oyster cultivation. M. Pouchet read a paper on "Change of Colour in Fish and Cray-fish." Two other papers were read on the "Molluscs of New Caledonia," and the "Ovology of the Silkworm."

LYONS.

(From our own Correspondent.)

THE MEDICAL CONGRESS.

WE have now passed the second day of the Medical Congress, and I am sorry to say that the impression is not so favourable as was expected. The defect lies in the national tendency to ceremoniousness and stiff adherence to rules, which entirely destroy the spontaneous expression of opinion. Those who regulate the sittings have committed the great mistake of allowing the reading of papers occupying as much as three-quarters of an hour, filled with unnecessary details—papers, in fact, the substance of which might have been communicated in ten minutes. Actual *bonâ fide* discussion, such as takes place in most medical societies, the speakers being limited to ten minutes or thereabouts, there has been, hitherto, none. Hence the sittings have been strangely wanting in animation; and, though the attendance has been good, the rooms soon thinned in an unpleasant manner, the members or spectators being one by one wearied with the length of the papers. I said *spectators*, as the rooms are free to students and any one who takes interest in medical matters. Therein this congress shows more liberality than was evinced by the late ophthalmological meeting in London. However this may be, it is a question whether the French medical congresses, as hitherto conducted, give an opportunity to the mass of men which compose them, and who, after all, are the mainstay of these meetings, of exchanging their views on the matters brought forward on these occasions. Up to this day I have not seen here anything of the kind. A few privileged men, and certainly men of merit, are favoured by the office bearers and allowed to read papers or deliver speeches which are neither more nor less than lectures; there have, however, been a few exceptions, but very few.

These congresses have a distant analogy to the annual meetings of the British Medical Association; and, in comparing them, it becomes apparent to those who have attended both that the division into sections is certainly conducive to much saving of time. And even in these sections it would be very desirable that the views of those who have something original or practical to bring forward should be given in a succinct manner, and pave the way to discussion. Papers might be eventually published *in extenso*, the pith of the discussion being carefully added. The French profession might take advantage of the powerful association for assistance in distress, which has now been existing in France for more than ten years, and give their annual meetings both a financial and scientific character. Thus congresses would become unnecessary. The good intentions, however, of the medical men of Lyons should be duly appreciated, and I have no doubt, from what I have seen, that the committee have worked very hard to render the meetings both useful and agreeable, and they have succeeded in securing a very handsome room in the Exchange building.

The first meeting was somewhat disturbed by the uproar of the stockbrokers in the hall, but this was remedied the next by holding the meeting half an hour after midday, when the commercial hall closes. On the 18th inst. the noble room to which I alluded was densely filled by medical men and spectators, and it was interesting to notice how cordially men from different localities were greeting each other. Of foreigners I have not noticed many. From the British Isles none have as yet arrived, but I saw Prof. Pacchiotti of Turin, well known in London, and Dr. Lombard, the eminent physician of Geneva. The congress was opened by the president of the organising committee, Dr. Diday, whose works on venereal complaints are much appreciated in England; and, in a very impressive speech, this extremely amiable man welcomed his professional brethren to Lyons. He requested then that the voting for office-bearers should begin, the scrutineers retiring to an adjoining room whilst the actual business was going on. I may say at once that Dr. Diday was deservedly re-elected, with most of his colleagues, Professor Verneuil of Paris being also amongst the vice-presidents. And here a very touching incident occurred, as M. Diday proposed that Prof. Stoltz, the eminent obstetrician of the now extinct faculty of Strasburg, should be appointed complimentary president. This wish was evidently a mark of sympathy to the man who, by the fate of war, had lost a chair which for more than a quarter of a century he had held with great credit. The question for the first day (as will be seen from the prospectus which was mentioned in a former number of THE LANCET, vol. i. 1872, page 488) was "On the Epidemics of Small-pox." Here one paper was read by the secretary, Dr. Dron, in the absence of Dr. Boutilliers of Evreux, and was

followed by some others, all rather long, and delivered in much too low a voice. Statistics of the havoc caused by variola in various localities, the more or less prophylactic power of vaccination, the importance of certain remedies, and the relative mortality were, in turns, touched upon; but in a very unconnected form, and leaving no practical impression on the hearers. An exception should, however, be made in favour of two short and pertinent speeches—the first by Professor Teissier of Lyons, the second by Dr. Lahilonne of Pau. M. Teissier plainly stated that much doubt still overhung the value of the different kinds of vaccination, and insisted on the necessity of a committee of investigation. He was also strongly of opinion that the English system of compulsory vaccination should be introduced into France. M. Lahilonne alluded principally to treatment, and said that many Prussian prisoners under his care had suffered from the hæmorrhagic form of small-pox, and that he had succeeded in saving them by the use of ergot of rye. In the evening of the same day some more papers were read, giving rise to no particular interest save a very warm speech by Prof. Pacchiotti of Turin, who defended the Jennerian vaccination. Altogether the animal vaccination, for some time rather in favour here in Lyons, found no strenuous supporters, and was, on the contrary, clearly found fault with. However, the president was very anxious that the congress should express a distinct wish to be placed before Government as regards compulsory vaccination. The votes were taken on the morning of the next day (the 19th), and it was unanimously resolved that the congress were in favour of compulsory vaccination. Now began the papers on gunshot wounds, and it might be expected that after the late war a mass of information would be brought forward calculated to throw much light on the treatment of these injuries; nor were we disappointed in this respect, though long speeches and long papers here again tended to mar the interest of the subject. But to save post, and in order not to fall into the mistake of a long letter, almost as bad as a long speech, I will reserve the consideration of this question and the eight successive ones for next week.

Lyons, September 20th, 1872.

Medical News.

APOTHECARIES' HALL. — The following gentleman passed his examination in the Science and Practice of Medicine, and received a certificate to practise, on the 19th inst.:—

Smith, Richard, Digbeth, Birmingham.

The following gentleman also on the same day passed his Primary Professional Examination:—

Twort, William Henry, St. Bartholomew's Hospital.

A NEW infirmary has been opened at Oldham, at a cost of £7500.

A FRESH outbreak of the cattle plague has been reported to the Privy Council from Yapham.

THE Government of India has given a grant of one lakh of rupees towards the fever relief operations in the Burdwan district.

SMALL-POX has again broken out in Chili with considerable severity. The disease appears to assert itself with the regularity of a Pronunciamiento.

RIVER POLLUTION.—Large quantities of salmon are being destroyed in the Ribble in consequence, it is stated, of the noxious streams poured into the river from works in the neighbourhood of Clitheroe.

FOOT-AND-MOUTH DISEASE.—A drover of Dovecote, Cumberland, was, on the 23rd inst., fined £20 and costs for having neglected to report the existence of foot-and-mouth disease amongst 500 sheep in his charge. The defendant was informed that he was liable to a penalty of £2500.

THE following is a list of the medical officers attached to the Anglo-Belgian Volunteer meeting in Ghent and Brussels:—Dr. Rhys Williams, Dr. Hebbham, Dr. E. Sandwell, Dr. Burke Ryan, Mr. R. Davis, Mr. J. A. Nunneley, Mr. J. R. Grey, Mr. V. Ambler, Mr. G. Ridsdale, and Mr. P. Hinckes Bird.

Medical Appointments.

ALLCHIN, W. H., M.B., M.R.C.S.E., has been appointed a Physician to the St. Marylebone General Dispensary.

BIRT, E., M.R.C.S.E., has been appointed Assistant Medical Officer to the Berks County Asylum, Montsford, near Wallingford.

DAVIDSON, D. C., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Junior Assistant Medical Officer to the Gloucester County Lunatic Asylum, near Gloucester, vice Philip, promoted.

DEANS, J., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the North Tawton or No. 3 District of the Okehampton Union, Devon, vice W. Densham, M.R.C.S.E., deceased.

DYAS, W., L.K.Q.C.P.I., F.R.C.S.I., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Templudigan Dispensary District of the New Ross Union, Co. Wexford, vice P. J. Carey, L.R.C.P.Ed., L.R.C.S.Ed., resigned.

GOWING, R. C., M.R.C.S.E., has been appointed Medical Officer for District No. 5 of the Daventry Union, Northamptonshire, vice Joseph T. Jones, M.R.C.S.E., resigned.

HARVEY, R. J., M.B., C.M., has been appointed Joint Lecturer on Anatomy and Physiology at the Carmichael School of Medicine, Dublin.

JACKSON, G., M.R.C.S.E., L.R.C.P.L., has been appointed Surgeon to the Pride of Devon Lodge of Odd Fellows, Plymouth, vice T. B. Forster, M.D., M.R.C.S.E., deceased.

JOHNSTONE, J. J. S., M.B., C.M., has been appointed Assistant House-Surgeon to the Huddersfield Infirmary, vice L. V. Dubois, L.R.C.P.Ed., whose appointment has expired.

KEYS, R. A., M.D., L.R.C.P.Ed., L.R.C.S.Ed., has been elected Medical Officer and Public Vaccinator for the Cloghan Dispensary District of the Stranorlar Union, Co. Donegal, vice G. K. Given, M.D., L.R.C.P.Ed., L.R.C.S.Ed., appointed to the Gortin Dispensary District and Workhouse.

PHILIP, J. A., M.D., C.M., has been appointed Senior Assistant Medical Officer to the Gloucester County Lunatic Asylum, near Gloucester, vice T. A. Buck, M.B., M.R.C.S.E., resigned.

PITT, E. G., M.D., has been appointed Medical Officer for the No. 1 or South District of the Parish of St. George-in-the-East, vice H. B. Courtenay, L.F.P. & S. Glas., deceased.

POGSON, W., M.R.C.S.E., L.R.C.P.Ed., has been appointed Medical Officer for the Seacroft District of the Leeds Union, vice J. B. Carter.

UNDERHILL, A. S., M.B., C.M., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Tipton East District of the Dudley Union, vice T. Underhill, M.D., L.R.C.S.Ed., resigned.

WEBB, C. F., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer for the Basingstoke or No. 1 District of the Basingstoke Union, vice J. P. Lewis, L.R.C.P.Ed., M.R.C.S.E., resigned.

WHEELER, W. I., M.D., L.K.Q.C.P.I., L.R.C.S.I., has been appointed a Surgeon to the City of Dublin Hospital, vice W. Hargrave, M.B., F.R.C.S.I., resigned.

WHITE, W. D., L.R.C.P.Ed., L.R.C.S.I., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the No. 3 North City Dispensary District of the North Dublin Union, vice H. Curran, L.K.Q.C.P.I., L.R.C.S.I., deceased.

YEO, G. F., M.D., has been appointed Joint Lecturer on Descriptive and Surgical Anatomy at the Carmichael School of Medicine, Dublin.

Births, Marriages, and Deaths.

BIRTHS.

BYRNE.—On the 17th inst., at York-street, Cheetham, Manchester, the wife of P. Byrne, L.K.Q.C.P.I., of twin sons.

ELKINGTON.—On the 17th inst., at Gillingham-street, Eccleston-square, the wife of A. G. Elkington, L.R.C.S.I., Surgeon-Major Grenadier Guards, of a son.

LOUSLEY.—On the 13th inst., at Eldon-road, Reading, the wife of Oded Lousley, M.R.C.S.E., of a son.

TRUMAN.—On the 17th inst., at Rippingale, the wife of John Truman, L.R.C.P., of a daughter.

YELF.—On the 15th inst., at Moreton-in-Marsh, the wife of Leonard K. Yelf, M.D., of a daughter.

MARRIAGES.

HUGGINS—PENROSE.—On the 14th inst., at St. Peter's, De Beauvoir-square, S. Tellcott Huggins, M.R.C.S.E., of Church-road, De Beauvoir-town, to Emily Jane, youngest daughter of A. W. Penrose, of Amwell-street, Pentonville.

MASTERMAN—GOODWIN.—On the 19th inst., at All Saints' Church, Norfolk-square, W., G. F. Masterman, M.R.C.S., L.S.A., of Burnham, Bucks, late Assistant-Surgeon, General Military Hospital, Ascencion, Paraguay, to Maud, second daughter of the late Chas. Goodwin, M.R.C.S., &c., of Addiscombe.

SWANSON—BAKER.—On the 25th inst., at the Parish Church, Thirsk, Geo. J. Swanson, M.D., to Ellen, third surviving daughter of the late John Baker, Esq., of Thirsk.—No Cards.

DEATHS.

BRYAN.—On the 20th inst., at Brighton, E. L. Bryan, M.D., of Kensington-park-gardens.

FALLOON.—On the 13th ult., E. L. Falloon, L.R.C.P.Ed., of Shaw-street, Liverpool, aged 53.

HALL.—On the 18th inst., F. Hall, M.R.C.S.E., of Stanhope-street, aged 73.

HUMPHREYS.—On the 1st ult., at Brass River, West Coast of Africa, Dr. G. R. Humphreys, aged 30.

KIDD.—On the 2nd inst., at Belvidere-place, Mountjoy-square, Dublin, Isabel Norah, aged 6½ months; and on the 16th inst., at Merrion-square South, Dublin, Lilian Elizabeth, aged 6 years and 3 months,—the beloved children of Leonard Kidd, M.B., Surgeon 51st King's Own Light Infantry.

MULVILLE.—On the 16th inst., W. Mulville, M.B., F.R.C.S.I., of Gort, Co. Galway, aged 76.

Medical Diary of the Week.

Monday, Sept. 30.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

Tuesday, Oct. 1.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.

Wednesday, Oct. 2.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2 P.M.
CANCER HOSPITAL.—Operations, 3 P.M.
OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Mr. Lowndes, "On the Registration of Still Births." — Dr. Snow Beck, "On Pelvic Hæmatoma."—And other papers.
ROYAL MICROSCOPICAL SOCIETY.—8 P.M.

Thursday, Oct. 3.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Friday, Oct. 4.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, Oct. 5.

HOSPITAL FOR WOMEN, Soho-square.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

Notes, Short Comments, and Answers to Correspondents.

THE ADULTERATION ACT.

THE Chelsea vestry have appointed their medical officer of health, Dr. Barclay, food analyst for the district, and that gentleman has lost no time in reporting to the vestry the opinion he has formed of what the Adulteration Act may and may not be expected to accomplish. Dr. Barclay thinks that the fact of guilty knowledge on the part of the vendor of an adulterated article which is required by the Act as necessary for a conviction will be difficult of proof in many cases. According to his reading of the Act, a grocer who sells Cayenne pepper adulterated with red lead is not amenable unless he knows of the admixture; but one who sells mustard mixed with white pepper may be convicted whether he is aware of the admixture or not, while the same mustard if mixed with flour and turmeric to increase its bulk or weight may be sold with impunity if the grocer does not know of the addition. If the Act forces the retail tradesmen to become the complainants against the wholesale dealers, so much the better for the public. We are quite prepared to hear of flaws in the Act; for, thanks (as we believe) in great measure to the cloud of legal verbiage in which it is considered necessary for the Legislature to clothe its wishes, it rarely happens that an Act passes which is not speedily discovered to contain some blunder or other. To embody a plain meaning in simple and unmistakable language is an accomplishment that our Parliamentary draftsmen (the Government ones at any rate) do not excel in.

A Dispensary Doctor.—The symptoms are somewhat peculiar, and resemble those of the affection known as "cerebro-spinal" or "purpuric" fever; but we strongly suspect that the purpuric manifestations are attributable to the hæmorrhagic form of small-pox—a type of the disease which was very prevalent during the late epidemic.

A "CRITIC" AT FAULT.

WE have to thank some good-natured friend for a copy of the *Manchester Critic*, dated the 14th inst., which contains an attack upon THE LANCET of a character so amazingly venomous, and so impertinently unwarrantable, that we can only account for its appearance in any journal with the least pretension to respectability on the supposition that it must in some way have escaped the cognisance of the Editor, who, we would fain believe, has since regretted its publication. The author of this precious effusion has quite evidently a strong antipathy to the Registrar-General's Department, the reasons for which are, no doubt, known to himself, and he has seized hold of our recent remarks upon the appointment of Lay Inspectors under the Public Health Act as a peg on which to hang some thirty lines of abuse directed against ourselves, because, forsooth, we not only tolerate a lay Registrar-General, but because we have on occasions, of which the writer in the *Critic* seems to have rather intimate knowledge, endeavoured to hold the balance justly between the public official and his opponents. We are accused of refusing admission to our columns of criticisms upon the Registrar-General's reports; the simple answer to which is that the only instance within our recollection of any such refusal occurred in the present year, and was based upon grounds which we stated both publicly and privately to the writer at the time. We remember, moreover, that the communication thus declined came to us from Manchester, whence the present attack now emanates. To attentive readers of THE LANCET it will be news indeed that we "never do anything but praise the Registrar-General." We can hardly be expected to condemn what we neither see nor hear of, and we only know of one of his Annual Reports containing remarks "needlessly and offensively disgusting to medical men," which remarks on their appearance we reprehended most strongly, stigmatising them as "impertinent, cynical in tone, weak in argument, and bad in taste." (THE LANCET, May 28th, 1870.) We have neither time nor patience to answer further a writer who is so utterly oblivious of facts, and who, besides, stands self-convicted of ignorance of the subject he pretends to handle when he blames us for not insisting upon the appointment of "a competent medical adviser" to be always at the Registrar-General's elbow! Is Dr. William Farr a native of Manchester, and consequently there denied the honour usually paid to a prophet everywhere but in his own country? The *Critic* has evidently some member of its staff whose vagaries the Editor will do well to restrain within decent limits.

DR. COOMBS (Castle Cary) begs to acknowledge the receipt of £3 3s. towards the expenses of Dr. Meeres in the late action of Watkins *v.* Meeres.

A CASE OF RHEUMATISM COMPLICATED WITH DIARRHŒA.

To the Editor of THE LANCET.

SIR,—Thinking that the following case might be worth publication in THE LANCET, from its unusual complication with diarrhœa, I have been induced to send it to you.

Miss P——, aged twenty-four, previously a healthy young woman, was attacked on Aug. 20th with acute rheumatism. In the course of a few days a very copious eruption of sudamina appeared over all the body; so profuse was this that, on desiccation, the cuticle upon the fingers peeled off in large flakes, much resembling the desquamation after scarlet fever. During the first week there was some little pain in the præcordial region, accompanied by a prolongation of the first sound of the heart. This pain gradually disappeared, but the altered sound persisted. Potash was administered, and afterwards, with marked benefit, aconite.

On Sept. 2nd the rheumatism had nearly gone. Following its disappearance excessive diarrhœa set in, the intestinal irritation being so great that everything taken was immediately discharged. This diarrhœa was entirely unchecked by the various astringents and opium, with opium enemas, and strict regulation of diet. The prostration was very great.

On the 6th Dr. Handfield Jones saw the patient in consultation with me. It was then agreed to remove her from a small bedroom to a larger and more airy one; bark and ammonia to be given every three hours, and small quantities of milk and brandy frequently. During the night violent sickness came on, which greatly increased the prostration.

On the 7th I directed that nothing was to be given by the mouth except champagne and ice, which was well retained; injections per rectum of milk, eggs, and brandy, alternately with beef-tea, and with each three grains of pepsine porci were given every four hours, and subcutaneous injections of a sixth of a grain of morphia in the epigastric region morning and evening. This had the effect of checking the diarrhœa and sickness, and on the 8th she was able to take a fair quantity of nourishment by the mouth.

14th.—Up to this time convalescence has been progressive, and she is now able to sit up, and takes two grains of quinine three times a day.

The irritation appeared to be limited to the stomach and small intestines, as the injections were well retained.

Anomalous cases of rheumatism are not uncommon. I now have under treatment a boy of nine years, whose principal symptom is purpura preceded by rheumatism.

I am, Sir, yours truly,
OWEN ROBERTS, M.R.C.S., &c.

Silchester-road, Notting-hill, Sept. 16th, 1872.

Laryngoscope.—It is contrary to our practice, for obvious reasons, to indicate the names of those who might be considered as "leading men" in this or that subject. Our correspondent must form his opinion from what has been said in reviews of their works, and from the scientific repute in which they are held by members of the medical profession.

A Health Officer will find the Report of a Sanitary Tour in this country by the Health Officer of Bombay in a Blue-book published by the India Office, entitled "Report of the Measures adopted for Sanitary Improvements in India," 1870.

M. M. should apply to the Secretaries of the various Shipping Companies.

EXPERIMENTAL PROOF OF CATTLE-PLAGUE CONTAGION.

WE have opportunities in the case of diseases among the lower animals of making experiments which throw a good deal of light on what is meant by the infective properties of various animal secretions in conveying contagious diseases. Some time ago an enthusiastic believer in the power of excreta derived from a cholera patient to convey that disease to other and healthy individuals, proposed that the experiment should be made in the case of some criminals condemned to death in India. We never heard, however, that this has been done. According to the *Veterinarian* for this month, advantage has been taken of the reintroduction of cattle plague to test the alleged conveyance of the disease to animals by their partaking of water containing the *materies morbi* of the malady. Some exudation matter and viscid mucus were removed from the fauces of a diseased German cow, and mixed with a pail of water, which was then given to a yearling heifer to drink. She refused to swallow more than a draught or two; but being kept from water for two successive nights and a day, she freely partook of the remainder. On the third day following the last drinking of the water she presented appearances which indicated that mischief was beginning, and an application of the thermometer test was had recourse to, which showed that the temperature had already risen to 105·2°. On the following day the symptoms of cattle plague were well marked, and from that time the disease progressed so rapidly that death followed on the fourth day of illness, and ninth from the time the infected water was first partaken of. We should add that the experiment was carried out under circumstances which rendered it impossible that the animal could in any other way, save by drinking the water, have been exposed to the infecting material of cattle plague. The result fully confirms the opinion arrived at during the prevalence of the disease in 1866, and establishes the views held by the best of the continental observers.

Mr. E. Y. Kellett.—If our correspondent will forward his paper, we will give it consideration.

CASE OF ASIATIC CHOLERA (?).

To the Editor of THE LANCET.

SIR,—On September 11th, 1872, I was sent for to see B. S——, a woman, aged twenty, whom, on visiting about mid-day, I found had been suffering from vomiting and purging since early in the morning of the 10th instant. Both the vomiting and purging were of the usual watery kind, so well described as similar to rice-water. The purging had stopped shortly before I arrived; but the vomiting was incessant, the matters being ejected in enormous quantities almost without effort. On applying the hand to the body, it felt much colder than natural, which was verified by the thermometer, which placed the temperature at 97·25°; the pulse was 80, and very weak, scarcely to be felt; whilst the patient, from the state of collapse she was in, looked fully forty years of age, being in reality only twenty. The skin had a shrunken appearance, and during my visit the patient had several paroxysms of sighing respiration. There was a good deal of epigastric tenderness (owing to the constant vomiting), and the patient had suffered a good deal from cramps in her feet the first day, but not since. No urine had been passed for two days, and percussion over the hypogastric region showed that the bladder contained no fluid. There was no delirium during last night; but the patient was restless and stupid when I saw her, and I found it sometimes difficult to make her answer questions. I prescribed a mustard blister to the epigastric region, and gave calomel in two-grain doses every third hour, and a mixture containing aromatic spirits of ammonia, chloric ether, nitric spirits of ether, tincture of digitalis, of each two drachms in an eight-ounce mixture, half an ounce every third hour; whilst bottles filled with hot water were applied to her feet. I did not see the patient next day, as I heard she was somewhat better, and had passed urine in the evening of the day I saw her. She gradually improved, and on the 14th September I found that the vomiting had stopped from the previous day, and that the bowels were moved naturally; the pulse was then 72, the patient saying that she felt all right again, but very weak. All medicine was stopped, and a tonic mixture was directed to be used for a week.

Yours truly,

Dublin, September, 1872. C. H. ROBINSON.

YOUTH WITHOUT INNOCENCE.

DR. SHORTT, of Madras, who, as most of our readers are aware, has devoted considerable time to the observation of poisonous snakes, and to investigations having for their object the discovery of an antidote to the fatal effects of bites of these animals, has recently communicated to the *Indian Daily News* a brief but interesting account of a Russel's viper (*Daboia elegans*), three feet and a half in length, which, after having been in his possession some seven weeks, had produced thirty-nine young vipers. Each of these was eight inches and a half long—their aggregate length being therefore about eight times that of the mother. The power for harm possessed by these little creatures was strikingly illustrated by one of them, of the tender age of six hours, killing in ten seconds a young partridge which had been introduced to its notice. Dr. Shortt, with the affection of a true naturalist, concludes his description with the remark—"I am glad to add that mamma and babies are doing nicely."

Dr. Lowndes. (Liverpool.)—There is no law compelling attendance in the circumstances mentioned by our correspondent. Humanity may prompt assistance; but no payment can be expected for services voluntarily rendered. Even the divisional surgeon is bound to act only under a written order. The practice in France and Prussia we do not know.

WE are requested to state that the late fire at Haydock Lodge Asylum was confined to a section of the building, and has not interfered with the reception of patients.

Inquirer (Glasgow) is probably correct in his diagnosis.

POST-MORTEM DELIVERY.

ATTENTION has recently been directed to this occurrence, of which we recently cited some illustrations from English and Continental authorities. It never rains but it pours, says a homely adage. Our contemporary the *Indian Medical Gazette* contains two communications on the subject. In the first, a fœtus, about the fifth month of utero-gestation, enclosed in its membranes, is described as having been found in connexion with the body of a woman lodged in a dead-house on the previous night. The body was much swollen, and the stomach and intestines distended with gases resulting from decomposition. In the second, a fœtus of about seven months was similarly discovered lying between the lower extremities of a woman who had died from snake-bite, and whose body had been deposited in a dead-house on the night previously. The uterus in this case was completely everted, and protruded from the vagina. It was distended with gas, and the body was much decomposed. It would seem that it is not at all an uncommon occurrence, in the hot and rainy seasons of India, to find some one or more of the pelvic organs protruding through the natural openings as the result of the great pressure exerted by the stomach and intestines when inflated by gas arising from decomposition, and when such is the case in a pregnant female post-mortem delivery may take place.

BENEVOLENCE.

MR. HAVILAND begs to acknowledge the receipt of £1 from Dr. Greenhill, Hastings, towards the fund for the relief of the three daughters of a deceased physician, the particulars of whose sad case were lately set forth in our columns. All subscriptions in future should be sent to Dr. Vinen, 17, Chepstow-villas, Bayswater.

Radius.—We never heard of such deductions from a fee for making a post-mortem on the order of a coroner as our correspondent mentions. He should resist.

TIVERTON INFIRMARY AND DISPENSARY.

THE following communication has appeared in one of the local newspapers at Tiverton.

The undersigned honorary medical officers of the Tiverton Infirmary and Dispensary, having felt it their duty to resign their appointments as such from the 29th instant at a meeting of the Committee held this day, consider that it is due to the subscribers of the institution briefly to state their reasons for having done so. They have hitherto willingly given their time and services gratuitously to the institution, and have made a point of not interfering with matters of finance, or with subjects connected with its general management, well knowing that these were in the hands of an able and judicious Committee. On strictly professional subjects, however, intimately connected with their medical duties, they have thought that their opinions should have due weight, and that that of a large majority of them should be acted upon when practicable. An appointment as house-surgeon having this day been made in direct opposition to the views and wishes of four out of the five medical officers of the institution, those in the minority at the meeting of the Committee have considered that, with justice to themselves, they cannot allow their opinions to be thus held of no moment, and have consequently withdrawn from the dispensary as honorary medical officers from the 29th instant.

(Signed) HENRY DOWNES, M.D., Deputy Inspector-General, Army Medical Department, H.P.
W. H. REED, M.R.C.S. Eng. and L.S.A.
JOHN BEEDEL, M.R.C.S. Eng, L.S.A.
L. SIDNEY SMITH, M.D., M.R.C.S. Eng., L.M., L.S.A.

Reporter, (Dublin.)—Although it is advisable, as a general rule, not to continue taking the remedy alluded to by our correspondent for any length of time, except where the patient is under medical observation, we do not believe that his symptoms are to be ascribed to its use. We would counsel him to consult some respectable practitioner in his own neighbourhood.

FACT FOR DARWIN.

THE dengue *fever*, so prevalent all over India, has, according to the *Calcutta Englishman* of July 23rd, attacked the monkeys at Jámbusir.

Mr. Larkin's paper has been received.

A CAUTION.

To the Editor of THE LANCET.

SIR,—In February last a man, coming with a false message, stole my pocket-case. Through the agency of the police I recovered it the next day, it having been found at a neighbouring pawnbroker's. This evening I have had the satisfaction of identifying and charging the individual. Doubtless he has carried on a system of petty robberies, and perhaps you will agree in the propriety of your making known a description of him. He has a pale face, prominent forehead and deep-set eyes, light-brown hair and moderate beard, thin lips, very short stature, a hunch-back; dressed in shabby black clothes and tall black hat. He is at Stoke Newington Police Station.

Yours truly,

Newington-green, Stoke Newington, N., Sept. 25th, 1872. GEO. J. B. STEVENS.

THE BERMONDSEY WATER FAMINE.

IN a Parliamentary Paper just delivered, Major Bolton, Water Examiner to the Board of Trade, reports upon certain statements submitted to the Board by a Mr. Orton and other memorialists from Bermondsey, implying that Major Bolton's visit to the district in June and the early part of July last had been unproductive of any improvement in the water-supply. Upon one point we hardly think Major Bolton meets the complaint made—namely, that owing to the dearth of water the health of the inhabitants would suffer. A statement of this kind made on the 11th July is surely not conclusively answered by showing that the health-reports of the district were good up to the 6th July.

DE LUNATICO INQUIRENDO.

AN amusing instance of the assumption of psychological knowledge was given at a recent meeting of the Bethnal Green Board of Guardians. The matron of the workhouse brought a charge against the medical officer, Dr. Adams, for placing a woman in the padded room as a lunatic, she, in her superior wisdom, considering the woman as only refractory. Dr. Adams, in meeting the charge, said that the woman was undoubtedly of weak intellect, and had been disorderly and vicious in the infirmary; he therefore placed her in the padded room for twenty minutes under the care of a nurse. One would have thought that such an explanation was sufficiently satisfactory to the parochial mind, and would have carried with it a reprimand to the matron for meddling in matters entirely beyond her ken and jurisdiction. But no! two sapient members of the Board stated that they had "interviewed" the pauper in question, and they were of opinion that she was not a lunatic, but was, in fact, able to work about the room in "quite a lively manner." With every respect for the two members of the Board, who may, for all we know, be good and worthy shopkeepers, we cannot but regret that they should have constituted themselves into a Commission in Lunacy, and attempted to define a line of demarcation the complex bearings of which so often puzzle the wisest of our trained experts. If this precedent were carried out, we should soon have the parish beadle sitting in judgment upon a pauper's mental capacity.

THE REIGATE AND REDHILL COTTAGE HOSPITAL.

THIS institution has now been in operation upwards of five years, and during that time 315 cases have been under treatment. During the last year, ending the 1st instant, 77 cases have been treated: 38 being surgical, including 11 cases of accidents, and 39 medical. The number of beds at the disposal of the Committee is 12, although 14 have occasionally been made up owing to the press of cases. Any legally qualified medical practitioner residing in the district can, by the rules, attend to his own cases in the hospital in conjunction with the medical officer.

Inquirer.—Parkes, Corfield, and numerous papers lately published in our own columns.

ADMINISTRATION OF FOOD THROUGH THE NOSTRIL.

To the Editor of THE LANCET.

SIR,—I have read with interest the correspondence on the above subject, of which my experience is limited. There is one point, however, which I deem of much importance, and which seems to have escaped notice, and that is, the volume in which the fluid is given. When given slowly and in small volume, the patients seem to be able to control it to some extent, and spit it out by the mouth; whereas if given in larger volume and hurriedly, the sense of impending suffocation makes them gulp it down. As to the mode of administration, I have tried a large syringe, small funnel, bottle, and an ordinary feeding cup, and, attending to the above points, all answered equally well. Yours truly,

Polmont, N.B., Sept. 21st, 1872. ALEX. W. MACFARLANE.

"WILLIAM HIGHGASON, AGED 107."

To attain fivescore years is to become historical and to excite interest. We confess to a great respect for people that live even to fourscore years and fourscore and a half; but under the shadow of fivescore we become reverent. Our reverence is not much abated by the fact that the respectable widow of Mr. Highgason, of 90, St. James's-road, Holloway, and to whom we are indebted for our information, has her doubts about her husband being so much as 107, though she thinks it not impossible that he might be 100 or 101. He was born in Shenley, Herts; but the register of his birth has not yet been made out. His occupations were of the agricultural order. He was a very healthy man, never ailed anything save a touch of asthma which he inherited from his mother, from whom also he seems to have inherited his great age, for she lived to be very old. He outlived all his original friends and family. He was twice married. Forty-two years since he was married to his present widow, who is now over 70. His sight was long very imperfect, and in one eye quite lost; but his wife says that just before his death he recognised all about him. Three daughters survive him. The result of inquiry in this, as in most such cases, is to induce the belief that there is a hereditary element in longevity, and to show that the evidence of the exact age is unsatisfactory. The cause of death was exhaustion.

Mr. Edward Pomier.—Our correspondent probably confounds the University of Pennsylvania with the American University of Philadelphia. The former is a highly respected University; the latter has had its Charter revoked for granting degrees without proper examination, and is altogether discredited. American diplomas are not recognised in England. We fear the recognition even of the best of them will be indefinitely deferred by the disclosures of the loose system of granting degrees and diplomas in the States.

L. H. should inquire at the Hall.

THE CASE OF MR. CROFT, OF SNITTERFIELD.

To the Editor of THE LANCET.

SIR,—In your number of Sept. 21st you insert a letter from Ellen Bastock, in which she denies being the mother of two children. I can only say, if such is the case, no one can regret more than I do that such a statement should have appeared in my friend Mr. Lawson Tait's letter. The report is current in this neighbourhood, and more than once been told me by her husband and his family. Mr. Lawson Tait is not personally responsible for this statement, having received his information from me; and I assure you that much as I have been distressed with this very sad case, it would pain me still more should any inaccuracy occur in making it public.

I remain, Sir, your obedient servant,

Snitterfield, Stratford-on-Avon, Sept. 25th, 1872. THOS. H. W. CROFT.

MILITARY MORALS.

A Military Surgeon sends us a communication *apropos* of the discussion that has taken place about the morals—or rather the immoralities—of a standing army. A good deal has been said of late about the facilities which enlistment into the army offers to men to desert their wives and families, leaving them to starvation or to the tender mercies of the parish. The Mutiny Act, however, contains a clause which enables the Minister for War to deduct a portion of the soldier's pay for the support of a deserted wife or children; but it gives no such power in the case of illegitimate children. It is perfectly true that even in the former case the claim is rarely established and acted on, and it is alleged that the existing regulations practically offer a premium to vice. Without discussing the question of the extent of army immoralities, we are inclined to believe that the new system of depôt centres will operate in a different way from that which many people imagine. A man who serves in a district where he is known, and who returns to the same neighbourhood when his service is over, will have a character to support. This is found to operate beneficially in the case of the German army. The smaller the distance between the civil and military ranks the better for both.

HYDRATE OF CHLORAL.

To the Editor of THE LANCET.

SIR,—Have any of your correspondents noticed one peculiarity in the action of hydrate of chloral—namely, its power entirely to check the catamenial discharge? I have three patients who are in the habit of taking the drug for attacks of asthma, and who have assured me that its exhibition is attended with this one drawback if taken at the onset of the monthly period. I have had no opportunity of verifying their statements, but imagine there must be some truth in them, as they are all three of them in different stations of life, do not know one another, and cannot have compared notes. Moreover, their statements were volunteered, and not elicited by leading questions. Your obedient servant,

Newport, I.W., Sept. 21st, 1872. G. H. B. DABBS, M.D.

A CASE OF DISTRESS.

THE sister and nieces of the late Dr. James Laidlaw are in great pecuniary distress at Margate. Dr. Laidlaw was an able member of our profession, and during the cholera epidemic in Barbadoes was sent out by the Government in conjunction with Dr. Gavin Milroy to report upon the outbreak. It appears a very deserving case, requiring urgent assistance, and we are asked to receive subscriptions for the poor ladies.

SNUFF-TAKING.

To the Editor of THE LANCET.

SIR,—In reply to your correspondent, "A Scotch Clergyman," in to-day's LANCET, I should advise him to find out whether his parishioner uses a leaden snuff-box. If so, to recommend him to change the leaden one for either a silver or wooden one, and thus, by removing the probable cause, he will also remove the effect. Yours obediently,

Hounslow, Sept. 21st, 1872. R. WADE.

*** If there be a suspicion of lead-poisoning, it would be well to subject some of the snuff to chemical analysis, and to ascertain how it has been packed.—ED. L.

WE are obliged to postpone until next week the insertion of a great many letters.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Playfair; Dr. Thorowgood; Mr. Williams, Cork; Dr. Hood, Tow Law; Dr. Dabbs, Newport; Mr. Meridew, Sunderland; Mr. White; Mr. De Lisle, Ostend; Mr. J. Edmans, Cork; Mr. Willmer; Mr. Mackintosh, St. Andrews; Dr. Kirkwood; Mr. Bowkett, Chichester; Dr. Sutherland; Mr. Harvey, Yokohama; Mr. Jessop; Mr. Russell; Mr. Horsell, Wragby; Dr. Coombs, Castle Cary; Mr. Cooke, Staines; Mr. Hosking, Oldham; Mr. Morgan; Mr. Atkins, Mold; Mr. Walters, Exeter; Mr. A. Harper, Hungerford; Dr. Duncan; Mr. Evans, Bradford; Mr. Halley, Glasgow; Mr. P. Cowen, Upper Holloway; Mr. Archer; Dr. Hamilton; Mr. Bradley; Mr. Baker; Mr. Howell, Christiania; Mr. Garbutt; Mr. Graham; Mr. Kempthorne, Leith; Dr. Richardson, Dursley; Mr. Sidney; Dr. Macrae, Gateshead-on-Tyne; Mr. Martin; Mr. T. Danvers, Cobham; Mr. J. Colmore, Bristol; Mr. Kelly, Dublin; Mr. Deverell; M. Masson, Paris; Mr. R. Bradshaw; Staff Surgeon Kellett; Mr. Richardson, Elland; Dr. Bennett, Dublin; Dr. Davies; Mr. Hampton; Mr. Bagshaw; Mr. Wharton; Dr. Sanders, Edinburgh; Mr. Powell; Mr. Manton; Mr. Stokes, Dublin; Mr. Eaton; Mr. Kingsford; Mr. Wade, Hounslow; Mr. Woodley; Dr. Rayner, Woodbury; Dr. Macfarlane, Polmont; Mr. Mansfield; Mr. Kerr; Mr. Wright; Dr. Rosser; Mr. Jessett, Erith; Dr. Yarrow; Mr. Brown; Dr. C. Black; Mr. Reeves; Dr. Freeman, Rippingale; Mr. J. Burtt; Mr. Holman, Stratford; Mr. Winstanley, Newhaven; Mr. Larkin, Bilston; Mr. Hopkinson, Whitby; Dr. Downes, Tiverton; Mr. Bowen, Rugby; Dr. Hall, Sheffield; Mr. R. Dawson; Mr. Ross; Mr. Lilly; Mr. J. Johnson, Wellingborough; Mr. Pogson, Seacroft; Mr. Strikland, Nottingham; Mr. Osborn, Huddersfield; Mr. Robins, Barmouth; Mr. Benton, Lutterworth; Mr. C. Pearce; Mr. Laughton, Ely; Dr. de Remy, Bordeaux; Mr. W. G. Hill, Edinburgh; Mr. Croft, Stratford-upon-Avon; Dr. Smith, Manchester; Mr. Kenny, Killeshandra; Mr. Wharton; Radius; Studens; A Second-year's Man; Rus; X. Y. Z.; Obstetricus; Inquirer; Reporter; M.D.; J. P.; &c. &c.

Penrith Observer, Huddersfield Chronicle, Lincoln Gazette, Bury Times, Dublin Evening Mail, Local Government Chronicle, Dundee Advertiser, Aberdeen Weekly Free Press, Church Review, Revista Médico Quirurgica, Western Lancet (San Francisco), *Sunderland Herald, Canada Lancet, Sunderland Times, Wiltshire Independent*, and *Downpatrick Recorder* have been received.